

Superhuman, Transhuman, Post/Human: Mapping the Production and Reception of the
Posthuman Body

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Declaration

I declare that none of the work contained within this thesis has been submitted for any other degree at any other university. The contents found within this thesis have been composed by the candidate Scott Jeffery.

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To my brother, for allowing to me to turn several of his kitchens into offices.

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ABSTRACT

The figure of the cyborg, or more latterly, the posthuman body has been an increasingly familiar presence in a number of academic disciplines. The majority of such studies have focused on popular culture, particularly the depiction of the posthuman in science-fiction, fantasy and horror. To date however, few studies have focused on the posthuman and the comic book superhero, despite their evident corporeality, and none have questioned comics' readers about their responses to the posthuman body. This thesis presents a cultural history of the posthuman body in superhero comics along with the findings from twenty-five, two-hour interviews with readers.

By way of literature reviews this thesis first provides a new typography of the posthuman, presenting it not as a stable bounded subject but as what Deleuze and Guattari (1987) describe as a 'rhizome'. Within the rhizome of the posthuman body are several discursive plateaus that this thesis names Superhumanism (the representation of posthuman bodies in popular culture), Post/Humanism (a critical-theoretical stance that questions the assumptions of Humanism) and Transhumanism (the philosophy and practice of human enhancement with technology). With these categories in mind the thesis explores the development of the posthuman in body in the Superhuman realm of comic books. Exploring the body-types most prominent during the Golden (1938-1945), Silver (1958-1974) and contemporary Ages of superheroes it presents three explorations of what I term the Perfect Body, Cosmic Body and Military-Industrial Body respectively. These body types are presented as 'assemblages' (Deleuze and Guattari, 1987) that display rhizomatic connections to the other discursive realms of the Post/Human and Transhuman. This investigation reveals how the depiction of the Superhuman body developed and diverged from, and sometimes back into, these realms as each attempted to territorialise the meaning and function of the posthuman body. Ultimately it describes how, in spite of attempts by nationalistic or economic interests to control Transhuman enhancement in real-world practices, the realms of Post/Humanism and Superhumanism share a more critical approach.

The final section builds upon this cultural history of the posthuman body by addressing reader's relationship with these images. This begins by refuting some of the common assumptions in comics studies about superheroes and bodily representations. Readers stated that they viewed

such imagery as iconographic rather than representational, whether it was the depiction of bodies or technology. Moreover, regular or committed readers of superhero comics were generally suspicious of the notion of human enhancement, displaying a belief in the same binary categories -artificial/natural, human/non-human - that critical Post/Humanism seeks to problematize.

The thesis concludes that while superhero comics remain ultimately too human to be truly Post/Humanist texts, it is never the less possible to conceptualise the relationship between reader, text, producer and so on in Post/Humanist terms as reading-assemblage, and that such a cyborgian fusing of human and comic book allow both bodies to 'become other', to move in new directions and form new assemblages not otherwise possible when considered separately.

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CHAPTER 1: PRODUCING AND CONSUMING SUPERHEROES

Posthumanism seems to you a sudden mutation of the times, in fact, the conjunctions of imagination and science, myth and technology, have begun by firelight in the caves of Lascaux (Hassan, 1977:205)

INTRODUCTION

For as long as humans have had culture they have tended to use it to explore the posthuman. From the Classical myths of Icarus or the Minotaur, forms that blurred the line between the human and technology and the human and animal, through to the modern superhero comic, humans have entertained themselves with posthuman visions that called into question the very category of the human itself. The scientific advances of the last century, in plastic surgery and prosthetics; neuropharmacology and robotics; genetics and information technology have brought us ever closer to actualising these visions and are an increasing source of concern for philosophers, scientists and, increasingly, a topic of interest for politicians and policy makers (e.g. Nordmann, 2004; Bostrom and Sandberg, 2011; Roco and Bainbridge, 2001).

New technologies continue to be produced, themselves producing ever more cyborgian realities. Meanwhile, the fictions of superhero comic books continue to migrate from their 'ghetto' in comic book fandom onto the big and screens of 'mainstream' audiences. The thirst for the posthuman, in both science and science fiction, has become popularised.

This thesis set out to answer two key research questions:

- How has the figure of the posthuman developed in superhero comics?
- What sense did readers of superhero comics make of the posthuman?

Although several books and articles have emerged addressing both the posthuman and superheroes in the last two decades very few have considered them in the light of each other, and none have addressed reader responses directly.

To answer the first question, this thesis offers a cultural history of the posthuman body its

various guises; fictional (here dubbed the Superhumanism), philosophical (here termed Post/Humanism) and, crucially, material practices (here called Transhumanism). However, as Brown points out, any analysis of comic books, "...often comes down to a privileging of the critic's own reading rather than a realistic consideration of how the text actually works for audiences", and as such, "the intentions and practices of both the creators and the consumers must be incorporated into the inquiry" (Brown, 1997: 29). To address this issue the thesis also incorporates interviews with comic book readers about their views of the posthuman body, not only in the form of the superhero, but also in terms of Trans and Post/Humanism.

WHAT THE THESIS DOES NOT DO

It would be worth acknowledging two theoretical schools that are not fully elaborated upon within this thesis, but lie dormant within its theoretical approach and subject matter. As such, some brief words on the subject are worthwhile. Firstly, the field of queer studies has long played a role in the study of comics. Brooker (2001) has even playfully that queer readings of superheroes have existed ever since Fredric Wertham infamously sowed the seeds for the 'comics scare' of the 1950s (discussed in Chapter Three). Alongside the potential of horror and crime comics to cause juvenile delinquency, Wertham also interpreted the relationship between Batman and his young side-kick Robin in homoerotic terms. Lendrum (2005) also highlights how Wertham's comments shaping the subsequent discourse around queer superheroes; as does Schott (2010) in his consideration of the shift from the 'implied' to 'actual' homosexuality of some contemporary superheroes in terms of fans' acceptance, resistance and appropriation of comics texts. Elsewhere, Palmer-Mehta and Hay (2005) have perceived positive representations of homosexuality in Green Lantern, while Shyminky (2011) argues that the queerness of the superhero is 'straightened' by projecting queer desire or fear on to the "gay" sidekick.

Similarly, many studies of the cultural representation of disability read texts ideologically as examples of 'Othering' practices common to representations of other minority groups (Shakespeare, 1994), arguing that such representations have real-world effects in terms of shaping social policy (Biklen, 1987:515). Certain canonical texts are often cited as early examples of disability stereotyping, for example Shakespeare's Richard III and King Lear (ibid), Tiny Tim in Dickens's A Christmas Carol, Moby Dick's Captain Ahab (Snyder and Mitchell, 2001), or Long

John Silver from Robert Louis Stevenson's *Treasure Island*. For Snyder and Mitchell (2001:369) media images of disability serve the same constraining function as medical discourse: "as medical science strains to reign in the disabled body's deviance, movies unleash nightmarish images of disability as a threat to social order". Thomson (1997) draws upon literary, feminist and social theory to study the freak show and literature, arguing that the figure of the disabled body functions as 'a repository for social anxieties' (1997:6). In effect, many cultural studies of disability are marked by an attempt to extricate disabled bodies from their 'historical mooring as medical and supernatural oddities' (Snyder and Mitchell, 2001: 381). This same trend can be observed in the way scholars of disability have approached comic books. Kokaska(1984), Alaniz (2004)and Lees and Ralph's (1995) explore the representation disability in superhero comics. By comparison, Squier (2008) shows a real engagement with comics studies and disability studies, noting that comics status as a medium one is supposed to 'grow out of' puts the comics medium in a unique position: "shadowed as they are by the label abnormal, comics can offer a rich area in which to explore some crucial issues in disability studies" (2008: 72). Squier focuses on independent comics while arguing that, "...in general the super-hero genre relies on the discourses of developmental normalcy for its role in the construction both of comic books and of disability" (ibid: 86). Such approaches rely on what Chapter Three refers to as a legitimization/criticism binary when superhero comics are approached.

Also connected to the concerns of this thesis is the relationship between disability and the Transhumanism, particularly in discussions of augmentation and human-machine interaction. For instance, Cromby and Standen (1999) investigate the pitfalls and potentials that cyber technologies offer for people with disabilities. Cabrera (2009) identifies the potential of nanotechnology to change the 'disability paradigm', addressing its potentials in terms of the medical, social and Transhuman models of disability and noting that in a Transhuman world the able-bodies would effectively become disabled. Furthermore, a number of disability scholars have considered disability in terms of Post/Humanism. For instance, Gibson (2006:191) draws on Deleuze and Guattari's concept of the becoming body-without-organs, to reconceptualise the, "... 'dependencies' that are part of the everyday experiences of people labelled as disabled", as 'connectivities'; interconnections between persons with disabilities, technologies and the environment. Gibson also sees a potential for disability studies to develop what Wolfe (2010:127) calls a 'fundamentally posthuman set of coordinates' that would require, "...a

radically altered ethics that is no longer premised on the rights of the generalized autonomous subject” (Gibson, 2006: 188). The adoption of Post/Human thought in these instances is an attempt to move beyond (but also contain) both medical discourse and the self-proclaimed emancipatory discourse of disability identity politics (ibid). Of course, it is just this emancipatory discourse that informs the studies concerned with the representation of disability studies cited above.

Both queer theory and disability studies have much to say about both posthumanism and comics studies. Indeed, the origins of this thesis lie in an original proposal to investigate representations of disability in superhero comics and how these related to posthumanism. In the course of the study however the theoretical approach to the nature of representation shifted somewhat. In particular, in focusing on particular identities both schools were inclined towards a legitimization/criticism dichotomy when it came to analysing superhero comics. As will become clear as the thesis proceeds, the adoption of a Post/Humanist approach, expressed methodologically through the adoption of Deleuze and Guattari’s (1987) concept of the rhizome, marks a deliberate attempt to avoid all such binary categories, including making claims about legitimate or illegitimate portrayals of the posthuman body.

Allied with this was a more ethical concern about the appropriation of disability studies by an able-bodied researcher in order to legitimate my area of interest. Despite the clear links between disability studies, posthumanism and comic books, and the valuable work done in these areas, this thesis focuses instead on a more general conception of the posthuman, favouring a cultural-historic approach to the posthuman body rather than reading it in terms of how well or poorly it reflects minority identities. The theoretical reasons for this are outlined in more detail throughout the opening chapters of the thesis

In keeping with this section, it is important to note the tension between the adoption of the rhizome as a theoretical position and the limits placed on it by my methodological choices and the final presentation of the thesis. This involves a recognition that as much as the research strived to, “...avoid tracing in favour of a Deluezo-Guattarian ‘mapping’, such a complete departure is not possible. Traces remain, despite our cartographic intentions” (Mazzei and McCoy, 2010: 506). Adopting the concept of the rhizome has certain implications for

understanding the choice of respondents and texts, and the collecting, analysis and presentation of data. Rhizomatic texts are much like what Denzin calls 'messy texts', reflexive texts that, "...are aware of their own narrative apparatus, they are sensitive to how reality is socially constructed, and they understand that writing is a way of 'framing' reality" (Denzin, 1997:224, cited in Sermijn et al, 2008: 647). However, as Bruns explains, for Deleuze and Guattari, concepts such as the rhizome,

are not always meant to be clear, since for them a concept is never exactly "about" something, but is a certain way of articulating complexities, as if to avoid closure or resolution whatever the matter at hand. In any event we are far from any form of systematic thinking (Bruns, 2007: 703)

Of course, in order to make oneself intelligible and to meet the requirements of the doctorate it was necessary to embrace some of Brun's 'systematic thinking' and to structure the thesis in the traditional manner. Honan (2007) encountered a similar dilemma when constructing her thesis, and presents a solution which this thesis also adopted:

First, the actual construction and ordering of the text followed the traditional mandates in that there was roughly an introduction, a discussion of methodology, a literature review, data analysis and conclusion. But, at the same time, each of the chapters of the thesis focused on a different tuber, a different middle, while still providing connections to other tubers, other parts of the rhizome. It is possible to read the text moving across particular plateaus...along lines of flight to other plateaus...there are connections, not only of linguistic devices but also between conceptual themes, that allow different pathways to be followed through the text (Honan, 2007: 533)

Resisting the organizational structure of the root-tree system, chronological causality and the search for the original source, the rhizome instead presents history and culture as a map of influences and events with no specific cause. Considering the posthuman body as rhizome therefore involves recognising that the posthuman body, "...is always in the middle, between things, interbeing, intermezzo" (Deleuze and Guattari, 1987:25). As such, despite the adoption of a fairly traditional structure in terms of presentation it is suggested that the chapters should

be read with the rhizome in mind, and that there are connections and pathways to be followed throughout the text. One articulation of this is the non-chronological presentation of the cultural history of the posthuman body, which begins with the 'Golden Age of comics, jumps forward to the contemporary comic book and then finally looks backwards again to the Silver Age of the 1960s. The aim here was to at least to emphasise that the appearance of these posthuman bodies is not a simple linear or teleological progression. The thesis is also explicit about the provisional nature of these discursive formations, a way of "...explicitly pointing out to the reader that the text one presents...is but one of the many possible presentations (or entrances)" (Sermijn et al, 2008: 646) into the rhizome of the posthuman body.

Moving non-chronologically from the Perfect and Military-Industrial bodies to the more anarchic or countercultural spirit of the Cosmic Body was also intended to provide what Sellers and Honan (2007: 153) describe as a, "...transformative approach to discourse analysis, perhaps replacing that kind of analysis that has previously focused on the deconstruction rather than transformative possibilities that are produced through a re-construction". Thus, while the thesis may not break entirely from formal structures of presentation, the concept of the rhizome certainly proved useful as a model of thought that moved away from arboreal explanations of the ideological meaning or essence of the posthuman body towards an understanding of the posthuman body not as being but as a process of becoming .

The adoption of the rhizome also resulted in a theoretical tension in the approach to respondents. The use of interviews (even semi-structured) present a fairly unproblematic account of respondents views and experiences, but it is important to admit and emphasise that thesis cannot ever present the respondents' complete rhizomatic selfhood (because it is always in a dynamic state of becoming. Moreover, while in the rhizome, "...no single organising principle predetermines the consistencies and compatibilities between the network of its elements" (O'Sullivan, 2002: 84), my position as researcher inevitably placed me in a more central position. Rhizomatic thinking foregrounds-even celebrates-that the researcher, "...can thus never take a view of the complete map of one's participant, seeing that this map is co-constructed, multiple, and constantly changing" (Sermijn et al, 2008:: 644). An initial corrective to this was to e-mail the reader response chapters to respondents in the hope of gaining feedback as the research continued that could, in turn, be fed back into the chapters. It was

hoped that this could result in a kind of co-authorship between respondents and me. In practice however, respondents tended not to reply to these missives.

THESIS STRUCTURE

The thesis is divided into three sections. Section One is comprised of four chapters. This first, Chapter Two, is a literature review introducing the figure of the posthuman body, demonstrating that the posthuman manifests in three particular (and overlapping) discursive realms that this thesis identifies as the Superhuman, Transhuman and Post/Human. The histories of Post/Humanism and Transhumanism are not to be conflated. In many respects Post/Humanism's interrogation of the tenets of Humanism make it very much opposed to Transhumanist values in several respects. Nevertheless both philosophies are concerned with the potential for new technologies and regimes of power to shape and alter human bodies. Making the figure of the posthuman a fundamentally corporeal concern.

Chapter Three surveys the still-nascent field of Comics Studies providing context for the research being undertaken by this thesis. The chapter goes on to consider the variety of approaches taken to thinking critically about superhero comics, highlighting the limits of structuralist approaches to comics and ideology before going on to discuss the few works that have approached superheroes through the lens of Post/Humanism. Arguing that any approach to textual analysis is limited by not considering the views of actual readers, the chapter next considers how comics' audiences have been theorised. The chapter will conclude by elaborating on how studying readers relationship with the figure of the posthuman addresses a gap not just within the study of comic book readers, but also the little examined question of how the human enhancement might be viewed by the public.

Chapter Four lays out a theoretical approach for the thesis that draws on Deleuze and Guattari's concepts of the 'rhizome' and 'assemblages', and Foucault's notion of 'discourse', all concepts already briefly presented in Chapter Two under the rubric of Post/Humanist critical theory. The chapter highlights the limits of some of the approaches to studying comics cited in Chapter Three. This is coupled with discussion of how a rhizomatic analysis differs in its approach to

more traditional ideological readings before demonstrating how a 'Post/Human' rhizo-analysis helps overcome the theoretical limitations of these perennial approaches.

Chapter Five presents a methodology based on this theoretical position. It first proposes the production of a cultural history of the posthuman in superhero comics, a qualitative method which, "combines the disciplinary strengths of writing history with the ferment of ideas associated with what might be loosely termed Critical Theory...[while situating] texts in a broad network of contexts and disciplinary knowledges" (Luckhurst, 2005:1-2). The chapter argues that such an interdisciplinary undertaking fits neatly with the rhizomatic theoretical approach adopted by this thesis while still allowing for a more recognisable form of Foucauldian discourse analysis. The chapter then goes on to justify its use of semi-structured interviews with participants on the same grounds.

Section Two answers the first research question: how has the posthuman body been represented in superhero comics? Using my own typology, it presents a cultural history which identifies three loosely bounded categories of posthuman body in superhero comics, the Perfect Body, the Military-Industrial Body, and the Cosmic Body. Each chapter journeys across and through the discursive plateaus of each body (each rhizomatically connected to each other as part of the rhizome of the posthuman body). In each instance the notion of the posthuman body as discourse, that is, a matter of both representation *and* corporeal/institutional practices will be highlighted, alongside the notion that each of these corporeal forms should be seen as an assemblage whose properties are not innate but the effect of what other assemblages (social, historical, philosophical) they connect up to. Thus, the development of each of these three types of Superhuman body is accompanied by parallel developments in the discursive realms of Transhumanism and Post/Humanism.

Chapter Six presents a nomadic journey through the rhizome of the posthuman form I have dubbed the 'Perfect Body'. Focusing primarily on what has come to be known as the 'Golden Age' of comics this chapter connects Superman and Captain America with two early forms of Transhumanist thought - the culture of physical fitness and the (related) pseudoscience of Eugenics. Post/Humanism too, makes an appearance at this point, but in almost unrecognisable form as a popularised, watered-down, 'misreading' of Nietzsche's idea of the *Übermensch*, from

which Superman gets his (mistranslated) name, and inspired both the Nazis and the Pulp supermen that preceded the superhero comic.

Chapter Seven jumps forwards to the present to consider what this thesis calls the Military-Industrial Body and argues that contemporary superhero narratives are increasingly concerned with both the production of posthuman bodies through the nefarious machinations of the military-industrial complex, and the regulation of these same bodies by the state. The chapter connects this to the historical development of Transhumanism and its links with libertarian thinkers. This link is highlighted through several critiques of Transhumanism as politically conservative or disengaged from social concerns. Donna Haraway's *Cyborg Manifesto* (which Chapter Two positioned as the 'ground zero' of Post/Humanist theory) was published in 1985, coincidentally chiming neatly with the concerns of contemporary comic books. Never the less, although many works of the last decade share certain affinities with Haraway's project the comics published contemporaneously with that essay during the so-called Dark Age of comics make clear that cyborg imagery may still harden around the thematic of masculinity.

Chapter Eight turns its attention to the 1960s and the Silver Age of comics, suggesting that this period is notable for the use of what I dub the Cosmic Body. This chapter's journey through the rhizome of the Cosmic Body and as such takes in the counterculture of that time and a particular vision of posthumanity that drew upon an eclectic mix science-fiction, Eastern spiritualities, psychedelic drugs use and the notion of 'cosmic consciousness'. It argues that this early Transhumanist discourse is reflected in the critical-theoretical work of several key Post/Humanist thinkers.

Having concluded the cultural history of the posthuman body, Section Three presents reader-responses to the posthuman body. The first three chapters are broadly presented to cover each discursive realm of the posthuman in turn beginning with the Superhuman, then Transhuman and then the Post/Human, mirroring the structure of Section Two.

Chapter Nine addresses several of the recurring criticisms of the Superhuman body, but in particular the charge of ideological fascism (discussed in Chapters Three and Six) and suggests that readers did not generally take images of the superhero's Perfect Body as a representation

of desirable or even achievable bodies, but as signifiers of the superhero genre, existing on the same plain of meaning as capes or masks. This reflexivity, or semiotic distance, between reader and text is explored further in relation to depictions of science and technology in superhero comics. The chapter then discusses whether respondents felt that the Superhuman could say anything meaningful or accurate about the posthuman. Chapter Ten deals with respondents' feelings about human enhancement and shares a rhizomatic connection to Chapter Seven's discussion of the Military-Industrial body. It discusses how respondents felt about the idea of human enhancement technologies. Having considered the Superhuman and the Transhuman, Chapter Eleven articulates how the participants felt about the more complex philosophical territory of the Post/Human (thus connecting it to Chapter Eight's discussion of the Cosmic Body). The most pressing theme in this regard was the question of mind/body duality. It then goes on to consider how several further dichotomies played into respondent's feelings about the posthuman body, particularly the perceived distinctions between natural and artificial and fiction/reality.

Chapter Twelve considers the reader-text assemblage and how this concept alters our understanding of reader-text relations, emphasizing how reader-text assemblages facilitated new becomings for respondents. These becomings include identity formation, with the figure of the 'geek' seen as both pleasurable and negative if not allowed to become further, or becomings in which the body was modified with tattoos, suggesting at least some movement towards the posthuman body. The chapter will also demonstrate how readers forming an assemblage with the Cosmic Body were inclined to form new assemblages, performing rituals and taking drugs in order to alter their own alignment with consensus reality.

Finally, Chapter Thirteen brings together the cultural history and the reader responses for a summary and conclusion.

CHAPTER 2: POSTHUMAN BODIES

INTRODUCTION

This thesis investigates the posthuman body in superhero narratives. Guiding this process were two broad research questions. Firstly, how had the depiction of the posthuman body developed in superhero comics? And secondly, what sense do readers make of these depictions? Taking seriously Voltaire's rule that, "if you wish to converse with me, define your terms" these first two chapters unpack some of the terminology and embedded assumptions within these two research questions. With that in mind this first literature review presents some background on the development of the posthuman body.

It would be misleading to suggest that posthumanism is a neatly bounded category. Indeed, as Miah has noted, "...the history of posthumanism has no obvious beginning, middle or end point in philosophical thought" (2007:95). Indeed, if it were desirable to make any claims for what exactly posthumanism 'is' or 'does' then it would almost certainly hinge upon just such as blurring of categorical boundaries, whether between the natural and the artificial, the human and the machinic, fact and fiction or social theory and superhero comics.

Never the less, as is obvious from the name, the figure of the posthuman while always concerned with the future status of humanity, manifests in several different discursive realms. As Badmington has noted, "...the debate about the end of humanism...was not the exclusive property of critical theory" (2000:8). Indeed, just as visions of posthumanity had emerged in the techno-scientific discourse of Transhumanism and the critical-philosophical discourse of Post/Humanism, the history of science fiction displays a similar concern with the question of what it means to be human, and what comes after the human. Indeed, for Badmington, posthumanism marks the meeting point of high theory and mass culture where, "...the boundaries between theory and fiction have been breached beyond repair" (ibid), giving birth to a new genre of what Badmington terms 'fictive theory'. Similarly, science fiction becomes considered less an entertainment genre and more as what Csicsery-Ronay (1991) calls "a mode of awareness" (cited in Carstens, 2009:13). That is, a form of cognition that incorporates scientific speculation, cultural theory, philosophy and unfettered imagination. Transhumanists,

critical-theoretical Post/Humanists and producers of science fiction can all be seen as attempting to create new conceptual spaces and metaphors adequate to our current technologised and information-rich society.

Roden (2009), for instance, sees two distinct posthumanisms that he terms the 'speculative' and the 'critical'. Simon (2003) formulates these as 'popular' and 'critical' posthumanism. Meanwhile, Castree and Nash (2004) identify three modalities of posthumanist thought. Firstly, the, "...Posthuman as an incipient historical condition ... [secondly] a set of ontological theses about the human that never was and never will be... [and thirdly] as a 'both/and' form of deconstructive reading" (2004: 1342). The posthuman can be seen as either an 'object of analysis' or as an 'analytical-theoretical position' (ibid). Braun (2004), McCracken (1997) and Panelli (2009) each offer further definitions and formulations.

Posthumanism is not a fixed, bounded concept but an emergent phenomenon borne of several overlapping discursive realms. For clarity this thesis describes the posthuman, in its guise in film, television and comic books as the Superhuman. Speculative/popular posthumanism, hinging on real world techno-scientific developments and geared towards human technological enhancement will be referred to as Transhumanism. All approaches that use the posthuman for critical or ontological purposes will be described as Post/Humanism. It is important to separate these concepts early on because, although they are related, "...the history of posthumanism should not be seen as the same as the history of Transhumanism" (Miah, 2007:6). As such the history of Transhumanism will be addressed first.

DISCURSIVE REALM 1: TRANSHUMANISM

Transhumanism is a specific movement but in this thesis also provides a useful umbrella term to describe a particular way of thinking about the human relationship with technology. The World Transhumanist Association (WTA) was founded by Nick Bostrom and David Pearce in 1998. Their 2004 FAQ defines Transhumanism as:

- (1) The intellectual and cultural movement that affirms the possibility and desirability of improving the human condition through applied reason, especially by developing

and making widely available technologies to eliminate ageing and to greatly enhance human intellectual, physical and physiological capacities.

- (2) The study of the ramifications, promises, and potential dangers of technologies that will enable us to overcome fundamental human limitations, and the related study of the ethical matters involved in developing and using such technologies (WTA, 2003:4)

Some common Transhumanist ambitions include 'mind-uploading'. This is the transference of human consciousness into a computer (a notion many critical Post/Humanists, as will be shown, find problematic); the insertion of computer processing technology into the human brain to either replace damaged parts or enhance it, e.g. with improved memory storage and retrieval capacities; cloning; the use of nanotech to manipulate matter atom by atom (and in effect realizing the alchemist's dream of turning lead into gold); the transgenic splicing of animal and human DNA so that, for example, a human body could regenerate a limb using the same genetic mechanism that a starfish or salamander does, or even, "...glow in the dark like jellyfish, smell with the sensitivity of dogs, or emit electrical shocks like the...electric eel" (Seiler, 2007: 276). While some of these technologies are closer than others such possible enhancements highlight the central thesis of Transhumanism that humanity as we currently understand it is simply a "work in progress" (Roden, 2009:2).

Surveying the corpus of works that could be said to constitute Transhumanism gives a strong idea of the movement's ambitions. For Bostrom (2005), Transhumanism is merely an extension of an ideological/philosophical position that has existed for centuries and he makes reference to such early works as *L'Homme Machine* (1750), Bertrand Russell's *Icarus and the Future of Science* (1924) and the biologist Julian Huxley's *Religion without Revelation* (1927) (which introduced the phrase 'transhuman') as paving the way for consideration of how humanity might be improved through technology. For now, it is illustrative just to peruse the titles of some of the many transhumanist texts that have proliferated over the last forty years, beginning, for example, with Robert Ettinger's *The Prospect of Immortality* (1962) and *Man into Superman* (1972). The eighties saw works such as Drexler's *Engines of Creation* (1986), which popularized the idea of nanotechnology, and roboticist Hans Moravec's *Mind Children* (1989) (consciousness uploading); F.M. Esfandiary's *Are You Transhuman?* (1989); Kurzweil's *The Age of Spiritual*

Machines and The Singularity is Near (2005); *Metaman and Redesigning Humans* (Stock, 1993; 2002).

These Transhuman visions rest upon the development of a number of converging technologies. These include such developments as nanotechnology (self-replicating, molecule sized robots), biotechnology, Information technology and cognitive science (sometimes known as the NBIC suite) (Roden, 2002), and GRAIN (genetic manipulation, robotics, artificial intelligence, nanotechnology). The promised/threatened effect of these technologies converging is the creation of, “posthumans whose capacities so radically exceed those of present-day humans as to be no longer unambiguously human” (Wilson and Haslam, 2009: 249). Moreover, “...such technologies may also lead to the creation of new living organisms, machines with human or superhuman intelligence, and humans with machine parts [cyborgs] and genetically enhanced bodies:” (ibid). As its name implies Transhumanism envisions these enhanced humans as a transitory phase on the evolutionary road to the no longer recognisably human posthumanity.

THE PRE-HUMAN IN THE POSTHUMAN

Despite the science-fictional tone of much Transhumanism, several commentators (e.g. Zimmerman, 2009; Graham, 2002) have argued that Transhumanist writings betray an ‘irrational’ or even mystical streak and that Transhumanism is, “...ultimately a theological, or Gnostic narrative” (Westwood, 2006:5) despite Bostrom being quite explicit in positioning Transhumanism within an enlightenment tradition of rational humanist thought. What can be said though is that cyborg imagery can be found in classical mythology-“mythical and fantastical ideas about human/machine hybrids are present from the stories of Icarus’ wings to Chinese, Greek and Arabic texts that are rich in the subject of automata” (Miah, 2007: 15). More germane for the moment is the Transhumanist notions of human enhancement and their ‘technocalyptic’ vision of the Singularity. The notions of bodiless personalities and superior evolutionary beings have religious or occult analogues. Badmington even notes that the nineteenth century occultist Madame H.P. Blavatsky was writing of the ‘post-Human’ as early as 1888 (Badmington, 2004:1344). The fixation of some Transhumanists on bodiless minds existing in virtual realities is not a Cartesian humanistic division of body and mind but a more archaic

Gnostic or Platonic view that regards the world of matter as an imperfect shadow of a higher realm of pure forms.

Elsewhere, Davis (1998) has investigated the connections between posthuman thought and imagery, new technologies and archaic and modern spiritualities (a matrix of mutual influences that he attempts to capture with the term 'techgnosis') and is not alone in observing that the growth of ICTs has facilitated the proliferation of, "...new religious movements untethered by ancient texts...synthesizing multi-dimensional, real time rituals, neo-pagan cyborg ritualists play in the medium they inhabit" (Brasher, 819). See also Ascott (2006) Larkin (2005) Slattery (2008), York (1995) and Tramacchi (2000, 2006) for other investigations into the confluence of emerging technologies and neo-shamanic practices. Sirius (2004) adds to an understanding of how the mystical-psychedelic counterculture of the 1960s heavily influenced (or rather, spawned) modern cyber-culture, including the philosophies of Transhumanism and what might be termed 'cyber-shamanism'.

TRANSHUMANISM AND ITS DISCONTENTS

While the scholars above have posited a religious aspect to the Transhumanist thought and fiction it is precisely this same impulse that drives many of posthumanism's critics. Bainbridge (2005), for example, conducted a pilot study of attitudes towards human technological or genetic enhancements amongst pro-Transhumanists and people with strong religious convictions. A fairly common criticism reported by religious respondents in the study was that, "...it is wrong to play God with mind, body, or spirit". Similarly, a recent article released by the Vatican's International Theological Commission stated that, "...the use of genetic modification to yield a superhuman or being with essentially new spiritual faculties is unthinkable...A man [sic] can only truly improve by realizing the image of God in him by uniting himself to Christ" (Vatican.va). At any rate, as Wilson and Haslam (2009:253) point out, opponents of modification are generally agreed that, "...humans are imbued with a 'given' or 'sacred' essence or soul-understood in either a religious or secular sense".

Like the discourse of posthumanism itself, critiques of it take many forms. Firstly, there is the equivalent of popular or speculative posthumanism, bioconservatism. In fact, Bostrom has defined bioconservatism as 'Transhumanism's opposite' (2005:18):

Which opposes the use of technology to expand human capacities or to modify aspects of our biological nature. People drawn to bioconservatism come from groups that traditionally have had little in common. Right wing religious conservatives and left-wing environmentalists and anti-globalists have found common cause.

The most vocal proponent of bioconservatism is Francis Fukuyama (2002) who argues that:

The most significant threat posed by contemporary biotechnology is the possibility that it will alter human nature and thereby move us into a 'posthuman' stage in history. This is important...*because human nature exists...* [It] shapes and constrains the possible kinds of political regimes, so a technology powerful enough to reshape what we are will have possibly malign consequences for liberal democracy and the nature of politics itself (2002:7, italics added).

Both Badmington (2004) and Miah (2007) point out that Fukuyama fails to clarify what he understands by the term 'human nature' despite his assertion that it exists. Fukuyama's argument does not bear close scrutiny. As Miah writes, "...at most, it reasserts the fundamental values of humanism" (2007:5). Indeed, Fukuyama's definition (which arrives, Badmington notes with some derision, only in chapter eight), smacks of the very totalizing, statistical model that critical Post/Humanism (and post structuralism generally) attempts to subvert.

Many critical Post/Humanists, such as Hayles (1999) above, are themselves engaged in a debate with Transhumanism. Most often this takes the form of highlighting the humanist tendencies in Transhumanism. Cook accuses the Transhumanist (in their earlier incarnation as Extropians) of paradoxically maintaining, "...a nostalgia for the phallogocentric legacy of patriarchal control and power and by creating a hierarchical dualistic system based on difference" (Cook, 2006:6) that separates the enhanced from the merely human and displays a, "...desire for rational progress and enhancement (re) creates a philosophical regression to hierarchical Cartesian divisionism"

(ibid). Annette Burfoots makes another case for, "...materialist approach to posthumanism that is wary of masculine desires for an unaccountable transcendence or dissolution of the holistic or 'formative' body" (cited in Simon, 2003:6). Transhumanism has been criticised by Habermas (2003) (who is also skeptical of Post/Humanism), fearing that biotechnologies will have adverse effects on equality and freedom: "We cannot rule out that knowledge of one's own hereditary features as programmed may prove to restrict the choice of an individual's life, and to undermine the essentially symmetrical relations between free and equal human beings (2003:23). Habermas, like Fukuyama, sees a worth in the notion of the rational, liberal humanist subject but sees it as a process that requires working through rather than abandoning. For Habermas the Enlightenment is an 'unfinished project' (1995). Badmington finds Derrida most useful in this regard, observing that:

Precisely because Western philosophy is steeped in humanist assumptions, he [Derrida] observed, the end of Man is bound to be written in the language of Man. Each 'transgressive gesture re-encloses us' because very such gesture will have been unconsciously choreographed by humanism...Derrida's work permits a rethinking of the anti-humanist position...[that] testifies to an endless opposition from within the traditional account of what it means to be human. Humanism never manages to constitute itself; it forever rewrites itself as posthumanism. This movement is always happening: humanism cannot escape its 'post-' (Badmington, 2000:9).

For this reason this thesis refers to critical-philosophical posthumanism as Post/Humanism. This conception of the 'Post/Human' is indebted to Graham (2002) who uses this term rather than the more common 'posthuman' (or even 'post-human') because it suggests, "...a questioning of both the inevitability of a successor species and of there being a consensus surrounding the effects of technologies on the future of humanity" and that the Post/Human is, "...that which both confounds but also holds up to scrutiny the terms on which the quintessentially human will be conceived" (2002:11). It is necessary then to address questions of power and social divisions if such technologies are not to rapidly exacerbate already existing social divides, such as the creation of technologically enhanced 'upper class' and a 'merely human' lower class. As such scholars (e.g. Wilson and Haslam, 2009) have called attention to what they see as a lack of rigor in the speculative/popular in Transhumanist writings. With this in mind it would be appropriate

to discuss those works are more strictly Post/Humanist than Transhumanist. This is to say, those works that use the figure of the posthuman to interrogate the idea of the human itself.

DISCURSIVE REALM 2: POST/HUMAN

It is comforting, however, and a source of profound relief to think that man is only a recent invention, a figure not yet two centuries old, a new wrinkle in our knowledge, and that he will disappear again as soon as that knowledge has discovered a new form. (Foucault, 1970:xxiii)

In its critical guise, Transhumanism becomes Post/Humanism. For scholars in this tradition posthumanism becomes either an interrogation of, or an outright denial of, Enlightenment humanism. Seiler, for instance, without being explicitly 'posthumanist', works from Berger and Luckman's argument that, "...individuals and groups socially construct perceptions of reality" to problematize, "...how science and society socially construct [the concepts of] organism and life" (Seiler, 2007:2). More explicitly, Pepperell has argued that posthumanism signals, "...the end of...that long-held belief in the infallibility of human power and the arrogant belief in our superiority and uniqueness" (Pepperell, 1995:176). To clarify the difference: whereas speculative posthumanism (defined here as Transhumanism) is situated within an Enlightenment discourse of self-improvement and progress, for critical Post/Humanists, "...the Posthuman is a condition in which the foundational status of humanism has been undermined...expressed in the postmodern incredulity towards Enlightenment narratives of emancipation and material progress" (Roden, 2009:1). Wolfe (1995) goes so far as to claim that there is, "...no project more overdue than the articulation of a post-humanist theoretical framework for a politics and ethics not grounded in the Enlightenment ideal of 'Man'" (cited in Badmington, 2001: 5).

Drawing from post structuralism, feminism, science and technology studies, post colonialism, and even fictional narratives, Post/Humanism may be thought of as, "a general critical space in which then techno-cultural forces which both produce and undermine the stabilities of the categories of 'human' and 'nonhuman' can be investigated" (Waldby, 2000, cited in Simon, 2003:3). Before proceeding it is worth clarifying what this means. Badmington concisely defines Humanism as:

A discourse which claims that the figure of 'Man'...naturally stands at the centre of things; is entirely distinct from animals, machines, and other nonhuman entities; is absolutely known and knowable to 'himself'; is the origin of meaning and history; and shares with all other human beings a universal essence. Its absolutist assumptions, moreover, mean that anthropocentric discourse relies upon a set of binary oppositions, such as human/inhuman, self/other, natural/cultural, inside/outside, subject/object, us/them, here/there, active/passive and wild/tame (Badmington, 2004: 1345).

The Enlightenment project, in figuring the human subject as a rational, autonomous figure possessed of a unique 'essence' was aided by the discoveries of Darwin in positing an evolutionary vision of constant progress and improvement for individuals and society as whole (Bostrom, 2005; Westwood, 2006). Simon has noted however, that:

The revolutionary Enlightenment narratives that challenged an oppressive feudal order and re-envisioned 'man' as rational, autonomous, unique and free have been in turn challenged and deconstructed. The emancipator impulse of liberal humanism has come to be understood as being unwittingly complicit in colonialist, patriarchal and capitalist structures (Simon, 2003: 4).

Thus, a new emancipatory figure, the Post/Human, emerges to fill the void left by (or perhaps just to hasten) the 'death of man'. Nietzsche's work played an important role in the developing of Post/Humanist thought (Schrift, 1995). This can be seen most clearly in the view that Humanism is little more than a secular theism, 'a slave morality', as Nietzsche would have it. Moreover, a debate is currently taking place in the *Journal of Evolution and Technology*, a peer-reviewed e-journal formerly known as the *Journal of Transhumanism*. The debate centres on a piece by Sorgner (2009) written in response to Bostrom (2005) dismissal of Nietzsche as a formative influence on Transhumanism:

Despite some surface-level similarities with the Nietzschean vision, Transhumanism—with its Enlightenment roots, its emphasis on individual liberties, and its humanistic concern for the welfare of all humans (and other sentient beings)—probably has as much

or more in common with Nietzsche's contemporary the English liberal thinker and utilitarian John Stuart Mill (Bostrom, 2005: 4-5).

For Bostrom then, "Transhumanism has roots in rational humanism" (ibid: 3). Indeed, Graham (2002:66) has noted that Transhumanism, seen through a Nietzschean lens, appears, "...fatally flawed by its inability to shed the vestiges of a Comptean 'religion of humanity'". Max More (2010), founder of the now defunct Extropian movement, takes a more measured stance, suggesting that, while there are indeed parallels between Nietzsche's thought and some Transhumanist ideas, "the latter are inspired very selectively" by the former.

For instance, while Nietzsche's concept of self-transformation can be fairly easily technologized as part of the Transhumanist agenda, his opposition to the notions of progress and transcendence sit less easily within a movement drawn to the idea of a technological Singularity. As Miah puts it, "...we cannot assume that the changing of mere biology is always accompanied by a radical 'transvaluation of all values'" (2007: 17). More (2010) suggests that there may be a division between Utilitarian and Nietzschean (or humanist and posthumanist) Transhumanists: "different variants of Transhumanism are possible...Transhumanism can be sanitized and made safe so it fits comfortably with utilitarian thinking", or a Transhumanism could exist that shares, "Nietzsche's distaste for the slave-morality of utilitarianism (which turns every moral agent into a slave yoked to the task of maximizing the greatest good for the greatest number)" (More, 2010:3). At the very least, as even Bostrom, whose commitment to the former has already been stated, concedes, "...Transhumanists insist that our received moral precepts and institutions are not in general sufficient to guide policy" (Bostrom, 2001).

In poststructuralist and postmodernist theory this amounts to a critique of totalising 'grand narratives', whether about history, society or the self, as potentially, or implicitly, authoritarian. Foucault, for instance saw the creation of subjects by the mechanisms of the Enlightenment project as a political question. The supposedly objective, rationalist pursuit of truth was in fact, a question of power. As Newman summarises

It is through 'regimes' of truth that individuals are dominated, pinned to an identity that is constructed for them...these identities which constrain the individual are made

possible precisely through absolute discourse on truth and morality (Newman, 2002:227).

For Foucault, humanism was, “...everything in Western civilization that restricts the desire for power” (Foucault, 1977, cited in *ibid*: 228). Foucault’s project then, has been said to be the creation of

New conceptual spaces in which the individual can explore new subjectivities and not be limited by essence...rather than achieving a stable identity that will become colonized by power (*ibid*: 232).

Like Foucault, Deleuze and Guattari were also inspired by Nietzsche’s anti-humanism. In place of the human they present the Post/Human image of humans as ‘desiring machines’ whose anarchic libidinal energies must be curbed by ‘Oedipus’, their shorthand term for the complex of discourses and disciplining technologies that oppress and deny human desire:

Desire is pulled into line, made safe, channelled into the structures of state power through its representation by humanist ideals. The state, where it once operated through a massive repressive apparatus, now no longer needs this-it functions through the self-domination of the subject (Newman 2002: 230).

As Deleuze and Guattari (1987:30) themselves put it:

The more you obey the statements of dominant reality, the more you command as speaking subject within mental reality, for finally you only obey yourself...a new form of slavery has been invented, that of being a slave to oneself (quoted in *ibid*).

Deleuze and Guattari’s (1987; 2000) brand of Post/Humanism forms a large part of the theoretical outlook of this thesis and as such will be addressed in greater detail in Chapter Four.

SOCIOLOGY OF THE BODY

The Sociology of the Body provides a necessary context for understanding the posthuman body. Indeed, the genealogy of sociology of the body precapitulates the interdisciplinary nature of this study's approach: "critical theory, literary theory, cultural studies, women's studies, history and critical science have all been influential on the integration of the body into sociological and anthropological analysis" (Cregan, 2006: 8). Furthermore, the epistemological and theoretical leanings of this study also have much in common with the recurring concerns of sociology of the body, many of which it shares with critical posthumanism, such as the suggestion that, "...the relocation of critical attention to issues of corporeality is a major shift for grand theory and signifies an abandonment of archaic epistemologies that do not credit the inescapable fleshiness of the human subject" (Taylor, 2007: 344). Shilling (2005) highlights perhaps the most pressing reason for this study to concern itself with sociology of the body, when he argues that

The intellectual significance of the body is now such that no study can lay claim to being comprehensive unless it takes at least some account of the embodied preconditions of agency and the physical effects of social structures... [And that] a recognition that its subject matter includes thinking, feeling bodies, rather than disembodied minds unaffected by their senses and habits, has become central to the sociological imagination (Shilling, 2005:1).

There is some irony to this as the emergence of the sociology of the body (and the accompanying corporeal turn in the social sciences more generally) was sparked by a perceived lack of engagement with the embodied subject in classical theories. As Turner has written, "...the question of the ontological status of social actors remained submerged, and in so far as classical social theorists turned to such issues, they defined the human actor in terms of agency, which in practice meant the rational choice of ends" (quoted in Shilling, 1993: 24). In other words, sociology's early lack of interest in the body was a result of its 'emphasis on abstract cognitive enquiry' which supposedly beyond the body (ibid: 26). Never the less, the body can be seen as an 'absent presence' (Shilling, 2007) in classical sociology, and there have been attempts to 'excavate' this 'hidden heritage' (ibid). By contrast, the body has become increasingly important to sociological thought in the last three decades.

Several writers posit reasons for the 'corporeal turn' in sociology (indeed, the human sciences more generally) in recent decades. Many of these theoretical and social developments interpenetrate one another. For instance, as Shilling has noted, the body became of interests for analysts of consumer culture who, "...highlighted the commercialized body as increasingly central to people's sense of self-identity" (2005: 2). The body here is repositioned as a, "...commodity which must be groomed to achieve maximum market value" (Lupton, 2006: 39). Featherstone's (1982) work is an important contribution to this model of the body, where the body becomes seen as a 'project' to be worked upon and displayed (Shilling, 1993: 35; Lupton, 2006: 40). For theorists following in Featherstone's footsteps consumer culture has, "...brought questions of the self to the front of the political, social and economic stage...moreover, with the decline of religious authority and a loss of faith in grand political narratives...the physical body seems to provide a locus and a focus for the affirmation of identity...and is a key site for the marking of difference" (Hancock et al. 2000: 7). Giddens (1991) has also proposed that the body has become the primary site of identity in advanced capitalist societies. The Transhuman desire to enhance human bodies could be considered as the natural extension of these body-projects.

As mentioned above, the work of Foucault and Deleuze (in collaboration with Guattari (1987; 2000)) have played a significant role in the development of Post/Humanism but theorists of the body have also embraced them. In the case of Foucault it was not only his ideas about discourse that have been drawn on, the notion of 'bio-power' and 'governmentality' have also been credited with hastening the turn to embodiment (e.g. Shilling, 2005; Goto, 2004). This, "...growing awareness of changing modes of governmentality... [And] attempts to manage differentiated populations" (Shilling, 2007:8) helped foster a sociological interest in the states attempts to control bodies en masse (Lupton, 2006: 34).

As Snyder and Mitchell summarize, "...Foucault's influence on body studies came about primarily through his ability to provide a working methodology for historicizing the institutional production of embodied subjectivities...[becoming] the basis for deflecting empirical practices back onto institutions and the professionals who staffed them" (2001:374). For Foucault, "...bodies are constituted within the specific nexus of culture or discourse/power regimes...there is no materiality or ontological independence of the body outside of any one of these specific

regimes” (Butler, 1989: 602). As Foucault (1984:87) himself put it, “...nothing in man- not even his body-is sufficiently stable to serve as the basis for self-recognition or for understanding other men”. Following the corporeal emphasis of this chapter, the main point of interest here is Foucault’s view that the institutionalized use of knowledge/power serves to create ‘docile bodies’.

Foucault contends that the body is shaped by, “a great many distinct regimes” which reach, “into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives” (cited in Hancock et al, 2000:2). It is, “...directly involved in a political field; power-relations have an immediate hold on it; they invest it, mark it, train it, torture it, force it to carry out tasks, to perform ceremonies, to emit signs” (Foucault, 1977:25). The body is shaped by the institutions of its socio-historical moment. As Cregan (2006: 43) has written: “without his demystifying of systems of thought (medical, psychological, penal, sexual), it is difficult to see how many areas of sociological inquiry would have progressed...or in some instances begun”. In spite of this, there are those who have expressed concerns over Foucault’s work being “amorphous and unhelpful” (ibid). Most pressing, as will be shown in due course, are concerns over the ontological status of the body in Foucault’s thinking. This is due to the fact that, for Foucault, “...the body is not only given meaning by discourse, but is wholly constituted by discourse...the body is present as a topic of discussion, but is absent as a focus of investigation” (Shilling, 2003: 65-70). It is for this reason that other theorists, while still acknowledging a debt to Foucault, have tried to engage with the body as a material object as much as a discursive one.

In common with Foucault’s ideas, Deleuze and Guattari’s philosophy of the body has been described as a, “highly relativist social constructionist position” (Lupton, 2006:23). A philosophical model that questions the binaries that modernist thought has inherited from Cartesian dualism. Instead it:

Troubles this assumption and posit[s] the fluidity of the subject, such that static position of the self-as-individual is called into question. From this perspective, selves are distributive, both confined to individual bodies and simultaneously connected, overlapping with other bodies, nature and machines (Gibson, 2006: 189).

As such,

A 'subject' for Deleuze and Guattari is re-imagined as a continual 'becoming' neither encased by skin and organs nor defined by static concepts and categorizations...Becoming is identity-in-motion rather than fixed being. It is active, occupying an identity zone without becoming fixated with or fixed to any of its elements. This open system of assemblages-as opposed to closed and static subjects- can be torn down and reconfigured (Ibid: 190).

For Gibson (2006) such a concept can be used, "...not to find fault but to challenge the limits of existing modes of thought" (ibid: 194), for instance reconfiguring the status of people with disabilities and their 'dependencies'-man-dog, man-machine, and woman-woman- as 'active becomings' in which subjectivity (and the limits of the body) are ever fleeting and partial. Deleuze and Guattari understand the making of bodies, "...to occur on a 'plane of immanence' in which things-objects, beings- are understood not in terms of eternal and immutable essences, but in terms of relations and effects" (Braun, 2004:8). Furthermore, "...Deleuze's bodies are multiple...not simply human bodies...the human body is not, never was, and never can be, simply 'itself'" (ibid: 9).

It is now possible to suggest that the common threads that link together work on bodies (both human and posthuman) are a concern with social construction and, most often linked to this, control and regulation of bodies (Morgan and Scott, 1993: viii). As a result of these abiding concerns, sociology of the body can be said to be marked by its own dualism between 'discursive' and 'pre-discursive' bodies.

As Shilling (2003: 62) notes, many of these works position the body as 'socially constructed', "...an umbrella term used to denote those views which suggest that the body is somehow shaped, constrained and even invented by society". Butler (1989: 601) has observed that the argument that, "the body is a site where regimes of discourse and power inscribe themselves...invariably suggests that there is a body that is in some sense there, pre-given, existentially available to become the site of its own ostensible construction". Yet the

impossibility of locating this pre-discursive body can easily lead to a situation where, “natural essentialism is displaced by discursive essentialism...society is brought so far into the body that the body disappears as phenomenon that requires detailed historical investigation in its own right” (Shilling, 2003:71).

Siebers (2001) categorizes approaches to social constructionism as weak or strong. While in its weak version social constructionism, “posits that the dominant ideas, attitudes and customs of a society influence the perception of bodies”, the strong version, “posits that the body does not determine its own representation in any way because the sign precedes the body in the hierarchy of signification” (738-739). Instead, the body is perceived as merely a text, “...a writing surface on which messages can be inscribed” (Grosz, 1990:62, cited in Lupton, 2006: 41). While generally acknowledging that the social constructionist perspective has been useful in revealing the dynamics of power/knowledge and the malleable nature of discourses and the creation of subjects, others have found the perceived lack of a living, breathing bodies at the heart of such views troublesome.

POSTHUMAN BODIES

The notion of the posthuman bodies emerged, “...out of a disenchantment that is both anti-aesthetic and anti-scientific” (Halberstam and Livingstone: 1995:1), and as a reaction to increasing techno-scientific developments that not only place stresses and controls on the body but confuse the boundaries between them (Shilling, 1993, 2005, 2007). As Seltin puts it, “...the cyborg and the post-human appear in a range of academic disciplines as symbols of radical change, signifying a range of breaks with past bodies, past modes of subjectivity and past humanities” (Seltin, 2009: 43). Post/Humanism can be seen as the point(s) where post structuralism, constructionism, feminism, techno-science, science fiction and the body converge.

Post/Humanism represents a challenge not just to our understanding of body-subjects and the relationship between macro- and micro social processes but also our ethical understandings suggesting an ethics,

of immanent modes of being, an ethics attuned to becoming-with all its dangers and all its hope. There are no beginnings to the body, no origin and no end. We are only, always, in the middle of 'human becomings' of many different types (Braun, 2004:9).

As opposed to an ethics based on the liberal humanist model which, it is argued, in attempting to recognize the unique difference and specific ethical value of the other, "reinstates the very normative model of subjectivity that it insists is the problem in the first place" (Wolfe, 2010:136-137). We can suggest then that the posthuman project, in its many forms, is essentially an ethical and embodied one. For Wolfe, the necessity of creating a posthuman ethics is that traditional attempts to have the Other(s) recognized;

Are forced to work within the purview of a liberal humanism in philosophy, politics and law that is bound by a quite historical and ideologically specific set of co-ordinates that, because of that very boundedness, allow one to achieve certain pragmatic gains in the short run, but at the price of a radical foreshortening of a more ambitious and more profound ethical project: a new and more inclusive frame of ethical pluralism that is our charge, now, to frame (Wolfe, 2010:137).

Interestingly, the desire of theorists to re-embody social theory is also shared by many commentators on posthumanism. As was demonstrated in the previous literature review there is a deep concern over the status of the body in Transhumanist writings:

Theories which conceptualize consciousness, subjectivity, DNA-code, molecular and cellular function purely in terms of disembodied information do so by strategically downplaying the importance (or even necessity) of material instantiation...this erasure of embodiment can be understood as an extension of Enlightenment humanism, with its universalizing claims also based on the dualistic nature of rational consciousness (Seltin, 2009:45).

In this regard Hayles (1999) argues for the re-embodiment of information while Richardson et al. (2002: no pagination) urge us to consider the "politically fraught nature of forgetting about the body, when typically it is the bodies of others that risk exclusion and effacement in this

process". The posthuman can then be seen as way of embodying (as a step towards resolving) the supposed conflict between micro and macro in sociological thinking:

For decades macro-sociologists have tended to focus on the 'social system', the structural, political and economic dimensions of social control, a theoretical space in which the body disappeared from view, while micro-sociologists were concerned with individual behaviour as socially constituted but neglected consideration of the embodiment of decision-making (Lupton, 2006: 23).

The figure of the posthuman embodies the interrelatedness and mutual dependency of nature-culture or micro and macro. For example how bodies shape and are shaped by cities (Cregan, 2006) or describing how the emerging bio-technologies, in allowing for genetic modification, make "... 'nature' effectively enculturated" (Graham, 2002:121). The posthuman body does not exist abstractly outside of political economy. Rather, "...the very body of the cyborg is structured and dictated on every level by capital" to the degree that, "...the intimate interfaces and co-pollution of technologies and bodies can only be understood in terms of capital and capital production" (Seltin, 2009:51). Where posthumanism departs from classical understandings of labour and production is that it does not privilege 'labour-as-identity', or indeed any fixed, and therefore exclusionary Humanist identity, but instead tries to reconceptualise the relationship and power differentials between technology, information, production and the body (ibid).

As such, posthumanism can be said to be very much concerned with bodies. The impetus for this, as Haraway put it in her *Cyborg Manifesto*, is that:

In the traditions of 'Western' science and politics - the tradition of racist, male-dominant capitalism; the tradition of progress; the tradition of the appropriation of nature as resource for the productions of culture; the tradition of reproduction of the self from the reflections of the other - the relation between organism and machine has been a border war. The stakes in the border war have been the territories of production, reproduction, and imagination. This chapter is an argument for pleasure in the confusion of boundaries and for responsibility in their construction (Haraway, 1991:150).

By pointing to 'production, reproduction and imagination' Haraway reminds us that the 'stakes in the border war' are embodied.

THE CYBORG MANIFESTO

It can be suggested that these concerns first crystallized in Donna Haraway's *The Cyborg Manifesto* (1985/1991). Braidotti (2006:197) views Haraway's work as a, "...pioneering effort to set up a connection between the culture of contemporary bio-technological sciences and that of human [sic] and social sciences". McCracken situates Haraway's concept of the cyborg within the same spectrum of, "...suspicion of 'grand narratives' that has upset many of the carefully constructed [humanist] projects of emancipation in twentieth century... [designed to] interrogate the central role of the liberal individual as the assumption around which most science works" (McCracken, 1997: 289). It was with deliberate irony then that Haraway plucked the Transhuman vision of the cyborg from the military-industrial complex.

NASA scientists in search of ways to make humans better adapted to space travel first coined the term 'cyborg' in the 1960s. A contraction of the terms 'cybernetic' and 'organism', the cyborg is a fusion of biology and technology, the natural and the artificial, functioning as a single being. Such figures have long been a staple of science-fiction but with the rise of communication technologies and other advances Haraway was able to offer the cyborg as, "a postmodern metaphor for the contemporary subject" (Phoca, 2001: 55). Importantly, this figuration is not just an abstract exercise but also a political one (Braidotti, 2002: 6). The cyborg is a being who encompasses and articulates, "...the kind of hybrid identities produced by the new global economy...both local and global, regional and transcultural, biological and technological" (McCracken, 1997:295). Indeed Haraway's project was in part a response to the limitations of Second Wave feminism and its failure to account for other subaltern identities. With the proclamation that she would 'rather be a cyborg than a goddess' (1991:181), Haraway was providing at once an emancipatory metaphor for a more plural feminism; a break (or rather, a mutation) from the association (by both some feminists and patriarchal discourse) of women with nature and men with science and technology; and a questioning of anthropocentric thought. Haraway's cyborg is a, "...feminist project located in a desire to reconstitute identity

politics” (Miah, 2007: 8), an analytical category and form of subjective consciousness: “a tool of empowerment that confronts basic modernistic and oppressive socio-cultural dualistic assumptions” (Cook, 2006:3).

The concerns of cyborg theory and its Post/Human kin are more philosophically rigorous than Transhumanism’s often-uncritical desire for simply enhancing human bodies with technology. As Miah notes, “...Haraway’s claims about cyborgs were not based on an interest to enhance humanity, but intended to disrupt uniform ideas about what it means to be human and the social and political entitlements this might imply” (Miah, 2007: 8). Indeed, Haraway has been explicit about her debt to the theoretical tradition of the Frankfurt School, describing the cyborg as ‘act of resistance’ against the ‘prevailing scientific consensus’ (cited in Murdoch, 2004:1357). As such, Haraway is suspicious of the idea that posthumanism is, “...located in the prospect of radical futures [as with Transhumanism] rather than socio-cultural reform” (Miah, 2007:8), and has responded to this development by extending her work on the cyborg to the concept of ‘companion species’, a concept that, “...similarly interrogates the human...[by considering] how humans live among other, non-human entities” (ibid). It will soon become evident that much of the literature of critical Post/Humanism owes some sort of debt to Haraway’s cyborg and is involved in a similar interrogation of humanist (and Transhumanist/technoscientific) assumptions.

FROM CYBORG TO POST/HUMAN

Cultural theorists in the wake of Haraway’s cyborg have developed a variety of approaches to Post/Humanism. Hayle’s influential (Badmington, 2001) work *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics* (1999), she traces the history and discourse of cybernetics in science fact and science fiction. Disturbed by roboticist Hans Moravec’s ambition of uploading human consciousness into a computer, she writes:

How, I asked myself, was it possible for someone of Moravec’s obvious intelligence to believe that mind could be separated from body? Even assuming such a separation was possible, how could anyone think that consciousness in an entirely different medium would remain unchanged, as if it had no connection to embodiment? (Hayles, 1999:1)

For Hayles, this aspect of Transhumanist philosophy, in conceptualizing the human self as merely a pattern of information, and moreover, conceptualizing information itself as something, "...distinct from the material substrate in which it is embedded... [creates a] dichotomy played out as the belief that information captured all that was essential about the organism" (Hayles, 2005: 136) and that the body was just excess meat. For Hayles, this will not do. She writes: "my dream is a version of the Posthuman that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality" (1999:5). In privileging the mind over the body, or the message over the medium, Moravec and others recreate the same Cartesian mind/body opposition that characterized, it is argued, the very Enlightenment project, and liberal humanist subject, that poststructuralist critical theorists attempt to dismantle.

This has much in common with Haraway's stance on Transhumanism outlined above- technological change, even radical technological change, cannot fulfil its emancipatory potential without an accompanying change in the power/knowledge matrix from which such technologies emerge. The insinuation being that without breaking decisively (or, 'working through' as Badmington would have it-see below) the human that lies within the figure of the posthuman, the same abuses of power and inequalities are liable to be repeated with ever more speed and efficiency, not to mention the as yet unimagined consequences that might result from posthuman technologies.

For Badmington, the task of the cultural critic to, "...open up spaces of, for, and to posthuman alterity" (2004:1348). To do this Badmington emphasizes the importance of poststructuralist theories to the posthumanist project (2003). His analysis of the three cinematic versions of *Invasion of the Body Snatchers*, for example, draws on Derrida's notion of deconstruction. Haraway, too, has claimed affinities between her own 'strain of posthumanism' and Derrida's 'deconstruction' and celebration of undecidability (Braidotti, 2006:6) and his efforts to reveal that, "...binary oppositions are rarely as certain as they seem" (Badmington, 2004: 1345). Badmington draws on Derrida and other poststructuralists because he is attempting to develop his own 'strain of posthumanism', one which, "...would resist humanism not by turning its back, but...of 'operating necessarily from the inside', folding tradition back upon itself until the implicit

becomes explicit and brings impossibility to bloom” (ibid: 76). This is a formula he reiterates elsewhere: “if the version of posthumanism that I am trying to develop here repeats humanism, it does so *in a certain way* and with a view to the deconstruction of anthropocentric thought” (2003:15). In the philosophy of Badmington and Derrida one need not, and indeed cannot break decisively from Humanism which always, “...bears within itself the necessity of its own critique” (cited in Badmington, 2003:19).

Bukatman (1993, 2003) is another cultural theorist who takes a magpie approach to theory, drawing on the ideas of Haraway, Jameson, Baudrillard and Deleuze and Guattari and more to question the status of the body in our highly technologized age, arguing that while "...the body may be 'simulated, morphed, modified, re-tooled, genetically engineered and even dissolved', but it is never entirely eliminated: the subject always retains a meat component." (Bukatman, 2003:73). Bukatman’s work also analyses and incorporates science fiction films, novels and comic books into his arguments, as do Badmington (2004) and Hayles (1999). As Badmington (ibid:8) has written, although mass culture such as science fiction books, films and comics have generally been regarded as generically distinct from cultural theory both, “...shared a common concern with the end of human sovereignty”, and that Post/Humanism was born when they met. Similarly, as Locke (2005: 26) points out, “super-hero comics deal with questions about the social and cultural meaning of science that are constituted out of the same basic stuff as academic concern, that is, available cultural resources that provide the means of thinking”. Having considered the literature on Transhumanism and Post/Humanism this chapter now turns to the Superhuman.

DISCURSIVE REALM 3: SUPERHUMANISM

This thesis began by asking how the depiction of the posthuman body of the superhero had developed. Given Haraway’s (1991:149) assertion that “the cyborg is a creature of social reality as well as creature of fiction” the genre of science fiction, whether in cinematic, televisual or literary form has been the subject of much scrutiny from the posthuman gaze and the quest for, “...positive social and cultural representations of hybrid, monstrous, abject and alien others in such a way as to subvert the construction and consumption of pejorative differences” (Braidotti, 2006:11). This postmodern blurring of theory and fictions is indicative of the way in which, as

Miah puts it, "...the philosophical and the cultural are interwoven within the history of posthumanism" (Miah, 2007:9). Klugman makes a similar point when he suggests that cyborg fictions "...motivate the reader to consider the social and ethical implications of new technologies" (2001:40).

That the corporeal turn in sociology was also evident in the humanities focuses attention on the way that bodies have been conceived of in media. Badley (1995), for instance, draws upon thinkers such as Foucault, as well as psychoanalytic and feminist theory to argue that the body is central to the horror movies of the eighties and nineties. Clover (1992) presents a similarly multi-theoretical take on the body in horror, specifically the gendered body. Tasker (1993) and Holmlund (2001) also share a concern with gendered bodies but their explorations take in other Hollywood genres. Jeffords (1994) study of images of the masculine body in Reagan era Hollywood cinema proposed a vision of the 'hard body' exemplified by Stallone's Rambo or Schwarzenegger in *The Terminator*. The strong, white, male body, in Jeffords view, came to stand for Reagan era America's vision of itself.

In the context of the 1980s 'hard body' however it is interesting to note, as Luckhurst (2005) does, that it appears at the same moment as the cyberpunk literature- a genre in which the flesh was seen as excess meat. Bearing in mind that many Post/Humanist critics are concerned with this Manichean separation of mind from body it is possible to place Haraway's *Cyborg*- where human and machine are not separate but interpenetrate one another- as the resolution of bodily dialectic, with the cyber punk and Transhumanist 'narratives of bodily disappearance' at one end and those action and horror films of the 1980s, "...that focused obsessively on the body, on an often violent assertion of the brute physicality of embodied existence" (Luckhurst, 2005: 213) at the other.

POSTHUMANISM, SUPERHERO COMICS AND READERS

Having considered the literature above, attention can now be (re)turned to the question of posthumanism. Nowhere is the posthuman body (and indeed the ethical dilemmas that come with it) more often represented than in the superhero comic book. Indeed, in the universe of Wildstorm Comics, superheroes are designated by the term 'Posthuman' (DC comics use the

term 'Metahuman', while Marvel uses the designation 'Superhuman'). McCracken summarises why the cyborg metaphor is useful to the study of popular culture and its difference from earlier approaches to the study of mass culture, noting:

A tendency in mass culture theory to conceive of the subject as powerless in the face of a great wave of pap. It denies the crucial role of fantasy in the formation of critical subjectivity...the transformative metaphors of the cyborg permits a different, more complex understanding of the relationship between reader and text than that provided by mass culture theory (1997:297-298).

McCracken's insists that mass culture should not be seen as a 'total system' but a 'contested terrain' (ibid). He goes on to suggest that cyborg fictions actually provide, "...the kinds of transformative metaphors through which...cultural conflicts...are mediated", and that, "it is through such forms that new kinds of consciousness (both empowering and disempowering) arise" (ibid: 289). More specifically, Taylor suggests that although:

Superheroes were probably the last thing Haraway had on her mind while composing her manifesto [...] their polymorphous perversity and androgynous bodies are well suited to her utopian ideals. They are strange farragoes of science and the arcane, individual will and artistic invention, subject to authorial whimsy and socio-political inconstancy (2007: 358).

Never the less, perhaps because the study of both comics and the posthuman remain relatively specialized (though growing) academic concerns, there have been surprisingly few investigations of this sort, and no sustained studies as yet. A sample of the few studies that do exist goes some way to illustrating the potential superhero comics have in contributing to the discourse of the posthuman body.

For Bukatman (2003) the spectacle of the superhero body is a means by which "the fear of instability induced by urban modernity" can be converted, "...into the thrill of topsy-turveydom" (Bukatman, 2003:3). Thus the superhero makes his first appearance in the modern, industrial age because: "only the Man of Steel has the constitution, organs and abilities equal to the rigors

of the Machine Age” (Bukatman, 1994: 99). Similarly, Thurtle and Mitchell (2007:286) argue that superheroes, “...embody industrial-sized bodily capacities without sacrificing embodied human perceptions... [Providing] readers with a means for exploring the forces and potential of industrial society” (ibid: 286).

Oehlert (2000) marks an early attempt to categorize the cyborg types in superhero comics. More (2006) delivers a more prosaic version of this in his elaboration of how many of the X-Men’s abilities may be made available if Transhuman technologies continue to be developed. Heggs (1999) goes into greater depth in his analysis, stating that superheroes, despite their transgressive potential, remain, “...open to naturalization, for example, around the thematic of masculinity” (1999:185), and are therefore poor exemplars of Haraway’s cyborg.

Conversely, Taylor (2007:358) suggests that superheroes offer a, “...culturally produced body that could potentially defy all traditional and normalizing readings” (ibid: 245). Rivera (2007) provides a positive step in this direction by reading the Marvel comic Deathlok (the story of an African-American man whose body is enhanced with robotic parts by a corrupt corporation), as an intervention, “in a medium with a troubling hegemonic past by appropriating a white cyborg narrative to dramatize the diasporic dimensions of black subjectivity” (2007:105).

Emad (2006) explores related ideas in her analysis of how the shifting depictions of Wonder Woman’s body over time articulate cultural mythologies about nationhood. The militarized body does, of course, have much in common with the Reagan era ‘hard body’. Indeed, when considering the history of the superhero body it becomes evident that the comics of the late eighties of the mid-nineties (what is sometimes referred to as the ‘Dark Age’ of comics, following the Golden and Silver Ages) trade heavily in these same images. In fact, capes and spandex perform the same semiotic function as military uniform-“power must display itself on the surface of the body” (Armitage, 2005: 82). Meanwhile, Gray (2003) has described the use of human-machine weaponry as a key feature of (post) modern warfare. Moreover, their origins in the Second World War mean that superhero comics were adopted for propaganda purposes very early on (Murray, 2000).

Elsewhere, Milburn has detailed the ‘nonlocal cultural mythologies that frame both military technoscience and comic books’ (2005:80). Milburn’s article uses the case of an MIT grant proposal to the US Army that utilized copyrighted images of a comic book super-soldier to illustrate the advances in military nanotechnology that it proposed to develop. The proposal was awarded \$50 million to set up the MIT Institute for Soldier Nanotechnologies (ISN). Milburn suggests that the drawing served as, “a conceptual bridge between the actual and the possible within the area of nanotechnology” (ibid: 79), the understanding of which was facilitated by a shared understanding by military and scientific personnel of the tropes of comic books. The science-fictional status of nanotechnology and militaristic visions of the supersoldier have come to, “...rely on cultural familiarity with comic book myths...to suggest that nanotechnology, in replicating or materializing these myths at the site of the soldier’s body, can create “real” superheroes” (ibid: 85).

Despite the diaspora of article cited here there has yet to be a sustained investigation into the relationship between the superhero and the posthuman. As such, alongside the reader responses this thesis makes a second contribution to knowledge in the form of a cultural history of the posthuman body in superhero comics that pulls together these diasporic strands.

CONCLUSION

This chapter surveyed the literature surrounding the posthuman body. It introduced the idea that the posthuman body is best understood as comprising three overlapping discursive realms which were categorized as the Superhuman (in media and literature), Transhumanism (dealing with technological enhancement of human bodies) and Post/Humanism (a critical-theoretical position that interrogates the assumptions of humanism). Each of these discursive realms is linked by a concern with human corporeality. For Foucault, humanism was, “...everything in Western civilization that restricts the desire for power” (Foucault, 1977, cited in Newman, 2002: 228). So much so that he suggested that, “...maybe the target nowadays is not to discover who we are, but to refuse who we are” (ibid). For Haraway and the cyborg this means that as, “anthropologists of possible selves, we are technicians of realizable futures” (1991:230). The next chapter surveys the literature on superhero comics and their readers, illuminating those studies with the information presented in this chapter in order to suggest that superhero comic

books can also be seen as a 'body genre'. Superhero narratives then, which deal almost exclusively with posthuman bodies, ought to be a fertile site for the anthropology of possible selves and realizable futures.

CHAPTER 3: SUPERHERO COMICS AND READERS

INTRODUCTION

The aim of this thesis is to investigate the production and reception of the posthuman body in superhero comics. To do this it asks two main research questions. Firstly, how have depictions of the comic book posthuman developed since the first appearance of Superman in 1938? Secondly, what sense do readers of superhero comics make of these posthuman bodies? The figure of the posthuman body was outlined in the previous chapter. This present chapter examines the landscape of both comics studies and audience studies in order to clarify where this thesis is situated within these research traditions and which areas and approaches invite further investigation.

In particular this chapter highlights gaps in our collective knowledge of how the body of the comic book Superhuman relates to the other discursive realms of the Transhuman and Post/Human. It also critiques those studies that make ideological claims about the Superhuman without reference to industrial factors or the interpretive practices of comics readers. Finally, having surveyed the work on comics readers the chapter suggests an avenue for investigation that reconceptualises the reader-text relationship in Post/Humanist (specifically Deleuze and Guattari, 1987) terms as a 'reading-assemblage'.

COMICS STUDIES

Although 'comics' have existed for over a century, and the comic book proper for just less than that, the academic study of comics can still be said to be, in what Beaty (2004) calls a, "state of infancy" (2004:1), though the last two decades have witnessed a, "...redoubling of the volume and scope of Comics Studies" (Eklund, 2006: 211). Never the less, Comics Studies has yet to be defined as clearly bounded discipline. This lack of definition is so acute that in much scholarly work on comics "...the attempt at definition... by now constitutes a distinct rhetorical convention-a formula or strategy for, in essence, the initial framing of comics as an object of study" (Hatfield, 2010:5). The act of naming and identifying has been something of a recurring theme, with haggling over nomenclature plaguing both the subject ("what is Comics Studies?")

and its object (“what are comics?”). In the meantime, however, both remain somewhat amorphous in both form and content.

This lack of disciplinary boundaries means that comics scholars are always reliant to some extent on the work of fans or fan scholars when compiling, say, historical or autobiographical material. In lieu of any academic interest until recently, literature by fans, creators and critics have filled the gap. For Smith (2011:140), such non-academic work remains useful because as fans and writer-artists, “...they pay close attention to the production, distribution and circulation contexts”. As such, any

Academic study draws from, and to a degree depends on, this enormous fund of fan material...yet, as it consolidates and...repurposes such fan scholarship, academic study offers opportunities for greater methodological rigor, a new kind of critical attention, and a wider relevance (Hatfield, 2006:368)

By contrast, Beaty (2004) and Smoodin (1992) bemoan the perceived lack of critical perspective in fan based or popular approaches to comics that Smoodin calls, “individualized, aestheticized, and ultimately depoliticized” (1992:131). For both, the problem is that much comics scholarship, in attempting to legitimate itself and its area of study, fails as criticism because of a reliance on a, “...redemptive critical methodology which stresses the political or aesthetic worth of comics” (ibid: 135). For Beaty however, “...the place of scholarship is not to celebrate but to interrogate” (2004:409). There are important historical reasons for this apparent reluctance to ‘interrogate’ comics including a longstanding academic and cultural prejudice against comics.

The earliest moments of sociological interest in comics were not of a positive bent, as evidenced most clearly in the ‘comics controversy’ of the 1950s, which has itself been the subject of much scholarly attention (Nyberg, 1998; Lent, 1999; Hadju, 2008; Beaty, 2005). Fuelled by the 1954 publication of *The Seduction of the Innocent* by Dr. Fredric Wertham, who alleged links between comic books and juvenile delinquency, this moral panic spread as far as the comics themselves, manifesting not only in America but also Britain and Australia (Barker, 1984). In an effort to protect their industry from the ensuing moral panic the various publishers decided to regulate themselves through a self-imposed, and stringent, Comics Code. The imposition of the code can

be seen to have ghettoised comics as children's literature, and the ensuing to have impeded the medium's development as an art form (McAllister, 1990; Lopes, 2006) and, by extension, as object worthy of academic attention.

One result has been a dichotomy in the study of comics between arguments that comics are ideological products of socio-economic hegemony and, in contrast to this, scholarship that, "...celebrates the diversity and complexity of issues raised in comic books" (McAllister, 1990: 55). Magnussen and Christiansen (2000:17) identify the recurring concern with semiotics and attempt to develop a 'grammar' of comics with the former critical/Marxist analysis, and also identify another tradition, often separate from these theoretical and methodological concerns, "...of primarily historical studies" (ibid: 21). Eklund (2006) has suggested that two main schools of Comics Studies had developed by the mid-1990s, cultural histories which place and contextualise comics and "...explanatory theories of what the medium is and can do" (2006: 211). More recently, Heer and Worcester's introduction to the *Comics Studies Reader* argues that comics scholarship "consistently returns" to four main themes- history and genealogy; a formalist emphasis on the language of comics; the 'social significance' of comics; and the study and appraisal of particular comics (2009: xi). This typology provides a useful structure for the remaining section.

COMICS HISTORY AND GENEALOGY

Works on the history and genealogy of comics display the most marked mixing of popular and academic discourses. Among the popular histories are Daniel's (1995; 1991) histories of the 'big two' comic book companies Marvel and DC Comics, both written and published with those publisher's blessing. These two companies form a virtual duopoly, currently sharing just over three quarters of the market between them. Their influence is such that they have, "...for better or worse, established the template for way the art of comics interacts with the commerce of comics and have set the bar for what the general public expects of the comic form" (Rhoades, 2008:1). Jones (2004) and Howe (2012) deal in detail with the beginnings of Marvel and DC, with particular attention paid to the treatment of creators by the publishers. Broader in scope is Goulart's (1991) history of comic books from their beginnings up to the nineteen-eighties. Sabin (1993, 2001) provides a valuable historical perspective on comics' development in industrial,

cultural and aesthetic realms. Like Sabin, several works (Skinn, 2004; Estren, 1993; Huxley, 2001) also emphasise the importance and history of alternative comics (in opposition to corporations such as Marvel and DC) in Britain and America.

SOCIAL SIGNIFICANCE AND POLITICAL ECONOMY

A number of works present comics as a form of cultural history or as 'indexes of mass culture' (Hatfield, 2006: 373). Savage (1998) presents the comics of the late 1940s and early 1950s as representative of societal concerns about issues such as Communism and the atom bomb. Costello (2009) reads the history of Marvel Comics after 1960 as reflecting changes in American self-identity during the same period. Skidmore (1983), Krensky (2007), DiPalio (2011) and Genter (2007) also find political themes and social concerns reflected in superhero narratives. Wright (2003) provides one of the most in-depth realisations of this view of comic books as reflections of wider societal trends and transformations.

Also common are purely textual analyses of social significance such as the seminal *Reading Donald Duck: Ideology in the Disney Comic*. This study by Dorfman and Mattelart (1984) is "...often cited as the paradigm of Marxist cultural analysis" (Bongco, 2000:9) in the history of comics studies which argue that the spread of Disney comics around the world represents a form of cultural imperialism. That Disney comics concealed a hidden capitalist ideology, presumed to have a subtle but powerful influence on children's minds. Barker's (1989) work is a sustained attack on the concept of 'ideology' in comics. Of Dorfman and Mattelart's work, Barker (1989) argues persuasively that they, "...theorise significance from what is absent". So for example, the lack of continuity between issues amounts to the absence, denial or hiding of history, or the absence of characters doing any work functions as a way of hiding the capitalist mode of production (1989:284).

There are methodological, as well as theoretical problems with such analyses too. Many such studies tend to analyse perceived cultural messages in comic books as, "...fairly independent of the comics' specific industrial and organisational context" (McAllister, 1990: 56). This knowledge is important in "shaping the degree of societal legitimation/criticism" of it's content (ibid). Brienza (2011) argues for a production of culture perspective that introduces a sociological

methodology to the comics' researcher's toolkit that focuses attention, "... upon the various social contexts and conditions of comics production". McAllister has performed a 'political economy analysis' of the North American comics industry during the 1990s, in which he concluded that ownership concentration, "the most salient industrial trend of the comic book industry in the 1990s...undermined innovation by stressing economic predictability" (2001:18-33). Gabilliet (2010) presents an overview of comics development in relation to other publishing formats, a focus on producers and consumers and a sociological perspective that moves from considering comics as a professional field to considering them as a field of cultural production. Locke (2012) has criticised this focus on production in favour of an "awareness of the importance of audiences as active constitutors of cultural meaning" (no pagination). Audiences will be dealt with in more detail later on. Before that however it is worth remembering the earlier suggestion that the study of comics has a tendency to fall into two modes, one that sees comics as ideological tools, and a second 'redemptive critical methodology' that emphasises their diversity and/or aesthetic worth.

CULTURAL CAPITAL

Gabilliet (2010) draws on Bourdieu to examine the complex social relations that have contributed to comic cultural illegitimacy. Lopes (2009) also borrows from Bourdieu to argue that the history of American comic books has been a fight for cultural legitimation. In response to this latter objection, some studies of comics have taken a more explicitly sociological approach. Elsewhere Lopes (2006) has utilised Goffman's concept of 'stigma' to explain how comic books became a discredited medium. Covering similar territory Brown draws on Bourdieu's concepts of cultural capital, citing the 1950s comics scare as evidence that, "...the economy of culture is powerful that any aesthetic tastes not conforming to the established norms of high culture are devalued to the point of being socially unacceptable" (1997b: 18). Several works have focused on 'underground' and/or European comics (e.g. Beaty, 2007; Sabin, 2002, 1993; Raeburn, 2006; Witek, 1989), often in a conscious attempt to broaden the discussion of comic books and play down the association of superheroes with the medium. Titles such as *Demanding Respect: the Evolution of the American Comic Book* (Lopes, 2009) and *Alternative Comics: An Emerging Literature* (Hatfield, 2005) evidences a desire for these narratives to be taken seriously as 'art'. Hatfield (2005:155) at pains to dismiss the, "so-called

graphic novels culled from the continuities of periodic superhero comics” prefers instead the more 'literary' historical and autobiographical narratives.

However, apart from the Pulitzer prize-winning *Maus*, a complex biographical and allegorical Holocaust story, it was arguably the publication of two psychologically and thematically complex and creator-driven superhero texts, *Watchmen* and *The Dark Knight Returns* that facilitated comics new 'respectability' (Klock, 2002; Wolk, 2007). Brown (1997) points to the development of an increasingly formal comic book canon among fans and consequent recognition of creators as auteurs as mirroring the values of high culture, and as such indicating a parallel rise in status for the comic book medium. Witek notes that this change in cultural attitude was accompanied by a change in language (1992:73). Comics became 'graphic novels', or 'graphic narratives', terms that lent the medium a literary cache. However, the notion that comics 'grew up' in the eighties was largely a myth that suited the media and certain publishers and creators (Sabin, 1993).

SUPERHERO COMICS

For many writers trying to get comics recognised as a unique art-form, mainstream superhero comics are the low genre against which superior works can be measured. Within an already stigmatised and hybrid medium, superhero comics are perhaps the most stigmatised and hybrid of genres. Work on superhero comics presents a microcosm of the macrocosm of comics studies already addressed. These texts evidence the same cross-contamination between popular and scholarly works and there is also a desire to form a recognisable canon.

As Smith (2011:139) points out, book length 'auteur studies' are a “time-honoured scholarly tradition to uplift a popular object”. Such works focus on key creators such as Alan Moore (Di Liddo, 2009), Jack Kirby (Ro, 2005; Evanier, 2008; Hatfield, 2012) and Stan Lee (Raphael and Spurgeon, 2004) or Grant Morrison (Singer, 2012). Brown, drawing on Bourdieu's ideas of cultural capital has noted, “...elite culture arises from an appreciation of established canons” (1997: 24). So for example, Klock draws on the literary theories of Harold Bloom to explicitly create a “superhero mini-canon” (2002:16).

SUPERHEROES: HISTORY AND GENEALOGY

Bongco (2000), Klock (2003) and Kaveney (2008) all deal specifically with the genre's development. Several authors focus on specific characters from a variety of popular and critical perspectives. Superman is the subject of DC-sanctioned histories (Daniels, 2008) as well as collected book of scholarly essays (Yeffeth, 2006). Captain America (Weiner, 2009), the X-Men (Wein and Wilson, 2005) have also been the subjects of essay collection while Batman has inspired popular histories (Daniels, 2004), essay collections (Pearson and Uricchio, 1991; O'Neill, ed. 2008) and book length studies (Brooker, 2001). More generally, Feiffer (2003) and Simon and Simon (2003) both give some insight into the 'Golden Age of Comics', while Jones and Jacobs (1997) and Schumer (2003) focus on the Silver Age of the 60s/70s. Voger (2006) offers an interesting, if non-academic, overview of the 1990s and the "Dark Age" of superhero comics. Coogan's (2006) history of the genre usefully situates the superhero in an evolutionary line that takes in earlier characters such as The Shadow and Tarzan. Andrae (1987) also places the emergence of the superhero in relation to an older tradition of superhuman characters.

This genealogical approach has led many scholars further back than the pulp superhero to emphasize their apparent mythological aspects. Hardly surprising given that, "...heroic narratives have a history that's as old as that of the establishment of human socialization" (Ndalianis, 2009:3). Reynolds (1994) seminal work was the first book-length argument for considering superhero comics as a modern mythology, an idea since expanded upon by others (see Ndalianis et al. 2007). Perhaps this explains why some have linked the superhero comic with the history of magic and religion. Kripal (2012), Wright (2007) and Knowles (2007) have drawn attention to the "surprisingly intimate ties" superhero comics have to, "...the histories of occultism, psychical research, and related paranormal phenomena" (Kripal, 2010:6). Others have found in superheroes a more generally religious symbolism (Oropeza, 2005; Lewis and Kraemer, 2010). As with the auteurist studies and canon formation cited above, such work demonstrates the desire to legitimize their object of interest by placing it within a wider cultural canon.

Emphasising the mythology of comic books does not always result in legitimation however. Notably, Jewett and Lawrence (2002) describe superheroes as a modern mythology, claiming that superheroes fall within the remit of what they term 'the American mono-myth' (1977), a

localized variant on Joseph Campbell's (1973) notion of the universal monomyth, a basic story pattern found in many tales throughout the world that for Campbell indicates a unity of human consciousness. They summarize the American mono-myth as involving a community in a harmonious paradise being threatened by evil; normal institutions fail to contend with this threat; a selfless superhero then emerges to renounce temptations and carry out the redemptive task, restoring the community to its paradisiacal condition; the superhero then recedes into obscurity. For Jewett and Lawrence (1977) mythology is ideological, and the prevalence of the American monomyth informs not just American popular culture but also its foreign policy, with vigilante superheroes serving to legitimate a vigilante superpower. The superhero comic remains a target of such analysis. Kahan and Stewart, "...the very idea of the superhero presupposes racial purity and ethnic inequality" (2006:7). Phillips and Strobl (2006) conclude that superhero comics express, "...fantasies about violent revenge" (328), while for Vollum and Adkinson (2003) superheroes are defenders of the dominant hegemony.

Another, related, common strand in the diaspora of articles relating to superhero comics addresses the politics of identity and representation. Portrayals of race, for example, have been addressed frequently (Brown, 2001; Singer, 2002) and feminist approaches to superhero comics are common. Peora (1992) finds that superhero comics present a 'fundamentally patriarchal view'. Frail (2004), Chenault (2007), Sievers (2003), D'Amore (2008) and Young (2006) all find superhero comics guilty of sexism to a greater or lesser degree. In addition though, there are methodological questions. Young's study focuses on Marvel trading cards, rather than the comics themselves but still titles her article, "Are Comic Book Heroes Sexist?" Frail (2004) meanwhile uses Dave Sim's *Cerebus* as part of her 'feminist sociological perspective' on comic books and readers. While the misogynist elements of that particular text are not in question (see Wolk, 2007) *Cerebus* remains a key text of the independent, intensely personal, creator-owned side of comic books. In other words, it can hardly be said to be representative of comic books generally, let alone superhero comics.

Other critiques of this sort hinge on the questions of form. Such approaches can be traced back to Eco's (1972) influential semiotic analysis of Superman who noted the on-going nature of superhero narratives, whose ending is always indefinitely delayed in a 'continuous present' as Eco called it (or 'floating timeline' as the comics community refers to it (Wolk, 2007)). Superman

can never actually change anything because the impetus for his stories would cease to exist. Eco argued that Superman's unchanging nature and related failure to fight injustice on the macro level implies, "...an implicit acceptance and defence on the hero's part of the tenets of capitalism and bureaucracy" (Peaslee, 2007:37). Indeed, several such formalist critiques have centred on the serial nature of superhero narratives. Andrae elaborates upon Eco's essay by claiming that the lack of continuity between issues, "...reveals a fixed core that is impervious to substantial change, thereby becoming a vehicle for the stable reproduction of social relations" (Andrae, 1980:136), and that furthermore, "...the disintegration of time in Superman stories has ominous psychosocial implications" (ibid: 137). The serialised nature of the superhero means that although they have the power to do so they can never change the 'status quo'. Dittmer (2007) has called this 'the tyranny of the serial', which enforces a 'structural limitation' on comic book discourse.

Similarly Wolf-Meyer (2003) argues that comic book readers hold a conservative ideology because they are more interested in stories predicated on this structural limitation than 'radical narratives' in which utopia is achieved rather than deferred in favour of next month's issue. Robson (2004: 138) criticises the fact that though gender equality is seen to flourish in superhero comics, the use of an everlasting 'present time' means that they never show us, "...how such conditions came to pass". As with Dorfman and Mattleart's (1984) critique of Disney comics, Robson finds superhero comics guilty as much for what they leave out as what they put in. Moreover these studies make claims about the impact of these omissions on readers, such as Andrae's claim that, "...one could argue that the destruction of time [in comic book continuity] undermines the individual's capacity to become a self-constituted subject" (1980:177). Not that formalist analysis has to imply that superhero comics are ideologically suspect.

For Reynolds (1992) the structure of the genre is such that minority characters are subsumed into the superhero narrative and its generic ideology. In short, there can be no exotic outsiders in fictional world populated with exotic outsiders. A similar argument to that proposed by Barker (1989: 127) whose draws on the formalist ideas of Vladimir Propp to suggest that, "...a wondertale [Propps term for the folk tale genre] takes over elements that enter it and converts them into elements-in-a-wondertale", as such, representations can only be understood within

the “transforming lens and structure” of the genre they appear in and can “reinforce nothing”. Others have argued that holding up comics like *Watchmen* as artistically and ideologically superior to serialized superhero narratives involves certain assumption about mainstream comics. As Jenkins writes of the so-called ‘deconstructive’ or ‘revisionist’ take on superheroes in *Watchmen*: “...calling such works revisionist makes no sense because there is not a moment in the history of the genre when the superhero is not under active revision” (2009:29). In short, the superhero comic book was, “...always intertextual, hypertextual and drew its power from the instability and ambiguity of word and image interactions” (Murray, 2007:15). For others the serialized nature of superhero comics has resulted in fictional multiverses whose genre tropes emphasise difference and multiplicity.

Thus, running counter to the works cited above are studies such as Palmer-Mehta and Hay (2005: 41) who explored representations of homosexuality in Green Lantern and found, “... an example of a counter-hegemonic text created by a network of gay and straight allies” (401). Despite her misgivings about continuity even Robson feels, “...Wonder Woman did pioneer a kind of feminist questioning, however commercially packaged and conceptually limited, at a time when few other voices in American society were raising such questions” (2004:23). Singer, who praises the superhero convention of the secret identity:

A convention that perfectly mimics the dialectical, existential or differential split which... [Some] ascribe to racial and other categories of minority identity. The secret identity provides the perfect means for exploring these real-life split identities” (2002: 114).

At this point we can note that as with the general discussion of comics studies above, the specific study of superhero comics also tends to fall into a criticism/legitimation dichotomy.

AUDIENCE STUDIES: A BRIEF HISTORY

Given that many of the authors cited above make assumptions about the positive or deleterious effects of superhero comics upon readers it is worth unpacking these assumptions. To do so requires some understanding of how the study of readers and viewers has developed. Rather

than a tangential diversion however, this journey will in end return to the road of comics studies and, finally, back to the posthuman body.

Concerns over the effects of media content on viewers, readers and listeners are as least as old as Classical Greece. Plato's worries about the insidious effects of storytelling on young minds led him to call for supervising, "...the makings of fables and legends" (quoted in Ruddock, 2001:125). Investigations into supposed 'media effects' have resulted in the development of a number of competing paradigms but has generally been marked by what Brown succinctly describes as an opposition, "...between theories of the producer's hegemonic power and the audience's ability to construct active, critical and oppositional interpretations" (Brown, 1997:20). This text/reader dichotomy is yet another example of the sort of binary opposition between legitimization and criticism that has been encountered in various analogous forms in the earlier sections.

In brief, it can be stated that audience research begins with the 'effects tradition'. Sometimes known as the 'hypodermic needle model', this paradigm presumes that the media is capable of injecting ideas directly into audience's minds (Ruddock, 2001: 40). If this notion seems overly simplistic it should be remembered that the impetus for much of this early research was provided by what appeared to be the very concrete persuasive effects of propaganda (by all sides) during the First and Second World Wars. Compounding this view still further were related contemporary concerns with (or vested interests in) the power of advertising (Bratich, 2005:254). Bratich suggests that the 'moral panic' framework, "...signifies the most conspicuous of problematizations [of the audience]" (ibid: 256). In this model, audiences are painted as "potential H-bombs" (Ruddock, 2001:129) primed to explode into violence and salaciousness by exposure to representations of the same. The comic book scare of the 1950s (discussed earlier) remains an archetypal example of this.

For many the media effects model was considered psychologically reductive. The positivist reliance on laboratory experiment and causal inference were viewed as an over-simplification of a complex issue, and one that was largely driven by a public rather than academic agenda (Livingstone, 1996), particularly evident in the case of moral panics. One of the major problems with effects research had been its emphasis on what the media does to people, misunderstanding, so it was argued, "...the relationship between media and society...[by

wrongly suggesting] that the media stand apart from other social institutions, trends and forces” (Barker and Brooks, 1999:39). A fallacy compounded by, “...a reliance on methods that were incapable of dealing with the morphology of social reality...artificial settings, removing reception from the contexts that made it meaningful” (Ruddock, 2001:175). The media-affects model later mutated into a highly theoretical position in certain structuralist and psychoanalytic ideas about the ‘spectator’ in film and literary theory. Several commentators (e.g. Brown, 1997, Murphy, 2004, Moores, 1993) agree that the film studies journal *Screen* was the most influential and vocal promulgator of this theoretical perspective.

TEXTUAL DETERMINISM

Put crudely, the position adopted by the most important *Screen* theorists was that, “...one could assess the social impact of a text simply by looking at its structure” (Ruddock, 2001:125). Utilising various admixtures (“a heady theoretical cocktail” (Moores, 1993:6)) of Lacanian and Freudian psychoanalytic concepts (Creed, 1998), Althusser’s notions of ‘interpellation’ and ‘Ideological State Apparatus’, and Foucauldian notions of how (cinematic) discourses construct subjectivity (Barker and Brooks, 1999:113) the scholarly analysis of cinema shifted:

From considering only the political content of individual films to the function of the cinema itself as a vehicle for disseminating the ideology of the dominant culture...seeking to uncover the cinematic mechanisms that bestow the illusion of subjectivity upon viewers by suturing them into the narrative through identification with the fictional subjects on the screen (Brown, 1997:23).

In effect taking a position of ‘textual determinism’ (Moores, 1993: 6) in which the ‘spectator’ became a ‘function of the text’ (Barker, 2005: 360), unknowingly fixed in a textually inscribed ‘subject positions’, “...a viewing subject with no alternative but to ‘make the meanings the film makes for it’” (Brown, 1997:24). However, for many scholars the attribution of an ideological nature to the grammar of film, while succeeding in providing, “...ingenious, and perhaps politically informed readings of texts”, were, “...ultimately ungrounded, arbitrary and shallow” (Wolff, 1999:501). Indeed, for Barker, “...the concepts of ‘spectatorship’, of ‘interpellation’ and

of the 'gaze' simply reproduced in abstracted language" the same claims expressed by the media-effects tradition (2005:359).

ENCODING/DECODING

In common with *Screen* and earlier theories of mass communication, Hall (1973) did indeed argue that the mass media, "...play a crucial role in defining, disseminating, popularizing and protecting the beliefs and values of a social mainstream, dominated by a narrow social elite" (Ruddock, 2001: 120). That is, that a text could indeed be 'encoded' with an ideological message. However, Hall's theory parted ways with earlier theories in two key respects. Firstly, he emphasised that texts are polysemic-if not quite pluralist. Hence, certain alternative readings ('decodings') were possible of a text even though certain ideological forces foreshortened the range of available meanings, encouraging viewers to instead accept the 'preferred' or 'encoded' reading. Secondly, and related to this, Hall emphasized that, "...the social subjects who decode a media message are not the same as the text's implied readers" (Moore, 1993: 18). In other words, even if we accept, as the *Screen* theorists did, that the structure of a text serves to convey a preferred message, and that such messages are often indicative of the social values of the ruling elite, it does not follow that the message can be transmitted directly into viewers' minds and hearts. Rather, the message must first be decoded by the receiver.

This interpretive act inevitably introduces a certain amount of white noise into the signal, opening the possibility for alternative decodings. The receiver's ability to decode a textual signal 'correctly' is dependent on their own standpoints. It is worth emphasizing that Hall did not suggest that audience decodings of a text could be infinite. He was keen to stress that certain preferred readings were intended by producers i.e. that the semiotic structure of a text limited the amount of readings that were possible. In terms of genre for instance, one could not easily decode a western for a sci-fi movie based on the visual cues presented by the film- horses and hats would signify cowboys and not astronauts to most viewers most of the time. However, this is not the same as the textual determinism of the *Screen* theorists, for in the encoding/decoding model, the meaning does not lie only in the text but in the interaction between text and viewer. The cultural critic cannot say what a film *means* per se, only what its preferred meaning might be. And even then, it does not follow that all viewers decode it this way.

This being so, the reader/viewer/decoder, while able to engage in, "...some free play within any conative sign" (ibid), is, if not constrained, then at least encouraged to read it in a certain way and within certain limits. Hall postulated three hypothetical positions from which readers might decode texts:

They could accept the preferred reading; they could accept parts of the text while rejecting others, constructing what he called a negotiated reading; or they could reject what the text was trying to make them think in an oppositional reading (Ruddock, 2001:126).

Following the discussion thus far it is possible to identify an historical trajectory in cultural studies, "...from a focus on texts to one on audiences" (Bratich, 2005:243). The first major step in this direction, "...was characterized by the method of audience ethnography, which displaced the controlled settings for investigating the variety of encodings" (ibid). The theoretical impetus for this turn was the concept of 'active audiences'. What is of interest at this juncture is merely the insight that audiences engage in dialogues, or meaning-making processes, with media texts, and are not just passively coerced into – crudely - white, male, bourgeois subject positions by them. The audience was now 'active'.

This allowed later scholars such as Fiske (1992) to theorise that audiences may engage in 'resistive readings' "...an interpretation of a text which changes its encoded meaning at the point of reception" (Ruddock, 2001:126). Sometimes called 'reading against the grain', this process is said to involve not a rejection of the encoded values of the text, as in Hall's (1973) oppositional reading, but a subversive interpretation of it. Ruddock presents the film *Top Gun* as an example. While an oppositional reading might decode the film's semiotic elements as furthering a jingoistic, militaristic American ideology, and reject the film on those grounds, a resistive reading might position *Top Gun* as a homosexual fantasy. This can only be done by working within a film's textual elements rather than rejecting them:

Since the signifier is always potentially ambiguous, it follows that the preferred meaning of a text might be unclear, or might be open to subversion (Ruddock, 2001:126).

Fiske (1992) describes what he calls 'activated texts'; "texts that are effectively produced primarily through the audience's appropriation of meaning rather than the producer's attempted positioning of the subject" (Brown, 1997:43). The idea of active audiences has had significant impact on cultural studies. In a methodological parallel, much work in this area has taken an 'ethnographic turn' (Moore, 1993:1) in investigating, "...the media's varied uses and meanings for particular social subjects in particular cultural contexts" (ibid). Because of this many scholars have shifted their attention away from audiences per se, to more particular 'interpretive communities' or 'fans'.

FANS

The appeal of fans for audience researchers appears self-evident. Not only do they demonstrate how 'textual meaning', "...spilled into other areas of life", but they are also, "...conceptually representative of a number of popular and academic fears concerning media power" (Ruddock, 2001:153). Ruddock demonstrates how these are also analogous to the differences between modernist and postmodernist approaches to the mass culture debate. For instance, in allowing textual meaning to spill over in to their 'real lives', the 'obsessions' of fans may appear from a modernist (read Structuralist) perspective as evidence of the Ideological State Apparatus' success in firmly enmeshing the viewing/reading subject in its workings; "ultimate victims of realism as textual practice; people who are entirely convinced by media artifice" (ibid: 154). From a postmodern (read poststructuralist) perspective however, "...fan activity is a discourse, a way of thinking and behaving that has more to do with an organization of the self than it does the aesthetic appreciation that is central to modernist appreciation" (ibid:156). Hill's concurs with this in as much as he argues that, "...Fandom is not simply a 'thing' that can be picked over analytically. It is also always performative; by which I mean that it is an identity" (Hills, 2002: xi).

An early and influential model of fans and fandom was Jenkins (1992) notion of 'textual poachers'. Jenkins's textual poachers seek to defend the practices of people whom, from his perspective, can be claimed as a subaltern group in as much as their tastes and desires are not sanctioned by the official culture, arguing that fans are not simply obsessive consumers but active producers he takes his central concept of 'textual poaching' from Michel De Certeau. In

Jenkins adaptation of these ideas, "...fans construct their cultural and social identity through borrowing and inflecting mass culture images, articulating concerns which often go unvoiced within the dominant media" (Jenkins, 1992:23). This identity building often incorporates material practices such as the creation of literature and video featuring favourite characters. This network of inter and extra-textual practices extends to the creation of fanzines, discussion groups and websites, the organising of conventions and the process of collecting. For Jenkins, this often places fans in opposition to the producers and owners of the copyrighted texts they are poaching from and repurposing.

For Fiske, fandom provides prime examples of what he called 'semiotic productivity'. Understanding popular culture, "...in terms of productivity, not of reception", Fiske (1992) provides three modes of semiotic productivity- audience activity that, "...occurs at the interface between the industrially produced cultural commodity (narrative, music, star, etc.) and the everyday life of the fan" (1992:37). These are semiotic, enunciative and textual productivity. Semiotic productivity, "...consists of making meanings of social identity and social experiences from the semiotic resources of the cultural economy" (ibid). Fiske remarks that this type of productivity is not just the province of fans but relates to audiences generally. Semiotic productivity is interior. Enunciative productivity, on the other hand, is when, "...meanings made are spoken and are shared within a face to face or oral culture" (ibid). Clothing and collecting are also forms of enunciative productivity. Textual productivity, finally, is the creation of written texts, films, illustrations and songs that draw upon the object of fan attention (ibid: 39).

Seen in the context of active audience theorists, the encoding/decoding model is clearly a moderate proposition. While theorists in the *Screen* mould might be accused of seeing ideological, "...conspiracy at every turn, Fiske [and others] seems to find cause for celebration on behalf of the subaltern in their every meeting with mass culture" (Brown, 1997:45). Never the less, active audience theory has not quite exorcised the spectre of ideology and the question of power. Barker and Brooks note that in making room for concepts of agency and opposition such theories still leave notions of

'Ideology' exactly as they were. They still involve a notion of 'positioning', that is, that if there isn't 'critique' or 'opposition', then 'discourses' and 'ideologies' are like viruses which invade the brain (1999:124).

Implicit within fan studies insistence on activity, productivity and poaching of mass produced texts is the suggestion that, "but for audiences' 'activity' or 'resistance' an unsullied text might influence them" (Barker, 2010: 6). Conversely, as was shown earlier, theories that position audiences as passive victims of the text are actually concerned with the productive activity that texts might influence them to engage in. Given that both these positions contain their opposite within them, a Post/Human perspective on text-audience relations suggests itself. Certainly, as Gray (2003:67) points out, recent studies of fandom have shifted away from the defensive mode of earlier theorists and begun to focus on, "...differences, nuances and even contradictions within fandom". Comic book fans, in particular, provide an excellent point of focus for elaborating upon this idea and thus return us to the main focus of this thesis.

COMIC BOOK FANS

Comics' fandom largely grew out of science fiction fandom (Gordon, 2012). Indeed, the creators of Superman were highly active in this already thriving subculture during the 1930s, as was Julius Schwartz, the highly respected DC comics' editor who oversaw Superman's comics adventures in the 1950s (Schwartz, 2000; Jones, 2004). During the Golden Age of comics publishers sponsored and controlled their own fan-groups. Hence, young readers during World War 2 were invited to join Captain America's Sentinels of Liberty, for example. In 1947 the first issue of *Comics Collectors News* was published (Schlesinger, 2010). This fanzine addressed those nascent collectors and admirers of the form that cartoonist Jules Feiffer (2003) writes of in his memoir of that time.

EC Comics was the first comics company to seriously engage with their readers. Editor William Gaines encouraged his 'EC addicts' to write in letters that were published in the back pages of titles such as *Tales from the Crypt* and *Weird Science*. The letters were printed with names and addresses, encouraging postal correspondence between fans (a feature of early sci-fi fandom) and providing the building blocks for a growing fan community. EC would feel the brunt of the

comics controversy of the 1950s (Williams, 1994) but ironically the comics controversy and the advent of the Comics Code helped, in a sense, to foster a sense of community among comics fans by further stigmatising them (Lopes, 2006) and thus making the need for legitimation, or conversely, pride in their outsider status, more pressing.

It was during the Silver Age of the 1960s- the second coming of superhero comics- that comics fan culture really began to consolidate itself. Marvel Comics picked up where EC had left off. Marvel's editor-in chief and main writer Stan Lee cultivated a convivial mood of conspiratorial agreement with readers by using his editorials to flatter their intelligence for choosing Marvel, and encouraging readers to write in. Regular dialogues took place within the letters pages both between the Marvel group and other readers. Readers were introduced to the "Marvel Bullpen" as Lee called it in his editorials, "Bullpen Bulletins". Herein, Stan Lee would write about the small group of writers (most often Lee himself) and artists that worked in the Marvel offices. He introduced a policy of naming the artist, inker and letterer in each comic, more often than not with nicknames like "Jolly Jack Kirby" or "Swinging Steve Ditko". The precedent for this was EC, who had always credited writers and artists.

The Silver Age saw a growth in fanzines and the first comic book conventions where fans could gather with like-minded people to buy, sell and discuss comics. In a related development, this period also witnessed the birth of underground 'comix', independently published comics that dealt, often explicitly, with the concerns of the emerging countercultures without having to obey the censorious strictures of the Comic Book Code. Underground, or alternative comix, "... were interested in self-expression above all" (Wolk, 2007:39). Influenced as much by EC's Mad Magazine and the funny animal books of the Golden Age as by LSD and rock and roll, the comics of the underground displayed a level of sex, violence and drug use unimaginable within the pages of a Comics Code approved mainstream comic. Although some have argued that comix represented an oppositional culture to the mainstream publishers (Williams, 1994, Wolk, 2007) it was the underground comix that helped pave the way for the consolidation of mainstream comic culture. The fact that many independent publishers that sprang up to take advantage of the, "... Informal network of head shops and record stores that were prime outlets for selling underground "comix"" (Wolk, 2007:39) also led to the system that would replace the traditional outlets such as newsstands and grocery stores.

This alternative system led to the opening of outlets, "... devoted primarily or exclusively to the sale of comic books and commonly operated by proprietors who were also comic book fans" (Wright, 2003:260). Wright elaborates further... "the specialty retailer placed unsold comic books in plastic bags, boxed them, and retailed them-often with higher price tag-as collectible items" (Ibid:261). The annual *Overstreet Comic Book Price Guide* debuted around the beginning of this stage in 1970 and, "... fan culture became a cottage industry in and of itself" (ibid: 253). At the same time fans were taking control within the industry. Coogan writes, "... adult fans began moving into the industry as professionals...fans offered the comics companies a chance to fill the [creative] vacuum with employees who specifically wanted to write comics and were young enough not to worry about benefits" (Coogan, 2006: 218).

The direct market had proved profitable for the comic book industry, but it also had a side effect on the content of comic books, in that the continuities of the Marvel and DC Universes became increasingly complex. Pustz (1999) highlights how this interest in comic book continuity to develop still further as older comics became more readily available. The supposed centrality of continuity to the reading pleasure of superhero comics is noted by several authors (e.g. Kaveney, 2008; Pustz, 1999).

STUDYING COMICS FANS

It is perhaps surprising that so little attention has been paid to comics' fans as they would seem to provide an excellent case-study for many of the concerns that have been addressed in this current chapter. In *Comics Studies*, as Sabin (2012:56) has noted in a recent issue of *Participations* focusing on comics' audiences, audience analysis, "has continued to be the poor relation to textual exegesis". Like Burke (2012), Woo (2012) and Gordon (2012) in that issue, this thesis hopes to make a fresh offering to our knowledge of comic book readers and their practices, but with a specific focus on the figure of the posthuman.

There remain relatively few studies of superhero comic book readers. Such work would help to redress the balance in this regard for as Pustz writes, "...inside interpretations of this culture may be problematic and subjective, but the few outsider perspectives on comic books...are

perhaps even more flawed by denying the consumers the power to explain how they use their favoured texts” (1999:202). Maigret (1999) and Brown (2001) both concur with this, and further call into question the notion of ideology being a “univocal process of inculcation” (Maigret, 1999). Brown finds that, “...fans demonstrate that they do not just passively accept dominant messages” (2001:200). One such study is cited by Fiske to enhance his elaboration of Bourdieu’s ideas in the analysis of fan cultures. He writes: “...Kiste’s (1989) study of comic book fans shows how accurately they can discriminate between various artists and storylines, and how important it is to be able to rank them in a hierarchy-particularly to ‘canonize’ some and exclude others” (1992:35-36). Other approaches to fans have included Bacon-Smith and Yarbrough (1991), who engage in ethnographic observation and interviews conducted at a cinema and comic shop to ascertain the responses of fans and non-fans to Tim Burton’s 1989 *Batman* film. Maigret’s (1999) exploration of male comic book readers uses interviews and analysis of comics letters pages to show that readers used superhero comics to explore new masculine identities.

However, these recent studies of comic book fans are not the first flowering of interest in their activities. As has been seen the comics scare of the 1950s flamed by Wertham’s *Seduction of the Innocent* encapsulated the media effects model, whereby innocent children are converted into sex-crazed, murderous, fascists by their comic book reading. But even as early as that dissenting voices could be heard. For instance, Ruddock cites a 1949 study that utilized open-ended, qualitative interviews to investigate the role of comic books in young male readers’ lives: “they did not find a moronic, uniform sample seduced into sin by these lurid rags, but instead found readers displaying different preferences and levels of media literacy who derived a range of pleasures from comics” (2001:69). Comics history and the mediums social standing may have been very different if this study, and not Wertham’s, had proved the most influential.

Pustz (1999) draws on historical research, interviews, fanzines and other publications in order to document the history of comics fandom. He highlights that comics fandom consists of a spectrum of what he, adopting the idiom of his subjects, calls ‘fan-boys’ and ‘true believers’- mainstream comic book fans (of corporate superhero narratives) and ‘alternative’ interests (in underground and independent comics, often autobiographical). Pustz uses the term ‘culture’ rather than fandom to highlight the marginal status of both the fans and the medium, but also because of its unique dependence on “comic book literacy”, the skills to comprehend and

appreciate the formal aesthetics of comic books. He goes so far as to suggest that the non-fan would have difficulty comprehending a contemporary comic book. Implying, in common with Wolk's (2007) notion of the 'super-reader', that even if the casual reader could decode the formal grammar of sequential storytelling they would be hard-pressed to make sense of stories that require a comprehension on the decades-old on-going narrative-continuities of the Marvel and DC Universes.

While Pustz's emphasis is on explicating comics fandom generally, Brown's (1997; 2001) approach addresses issues of race and masculinity specifically. Brown's PhD thesis on Milestone Comics, an African-American owned company specializing in black superheroes (1997a; published 2001), deals with both fans and creators, elaborating on the ideas about cultural capital cited above and also drawing on Barker's work. Utilizing participant observation and interviews, Brown argues that Milestone Comics provided alternative models of black masculinity for their readers. Textual analysis is used to further bolster this observation, including tracing the history of black superheroes from the 1970s onwards. This methodological mix is an approach which the next chapter on methods argues should be taken by this research project itself.

Barker's early work on comic books provides several indicators for the directions this thesis might take. Barker's (1984) *A Haunt of Fears* investigated the British horror comics scare, illustrating the international scope of the comics controversy, with protests and sometimes the burning of comic books taking place not only in America but also Britain and Australia, demonstrating, if nothing else, the global reach of the American comic book. Barker found that the British variant was spearheaded by the British Communist party, who successfully ignited the panic by changing its discourse from one of American cultural imperialism to a moralistic discourse of protecting young minds from images of horror and violence. He notes with irony that the British Communist Party's rhetoric blinded it to the fact that the EC horror comics were actually one of the few popular American forms that resisted (and satirized) the anti-communist hysteria of McCarthy era America. Indeed, this was partly responsible for EC's downfall at the hands of the American campaigners.

Barker's next study (1989) centred upon the short-lived British weekly *Action*, itself a victim of a moral panic in the late 1970s. By asking respondents to rate themselves as 'casual', 'regular' or 'committed' readers of the comic Barker discovered an interesting trend that contradicted the claims of media effects theorists: "it appeared that the closer the connection, and the greater the 'influence' of the comic, the more readers were made to think and reflect and argue" (Barker and Brooks, 1999:14). This research was followed by a (1993) study of readers of another British comic, *2000AD*. Again, for readers who took the comic 'seriously' and allowed it, "to cross into other parts of their thinking", the apparent violence and horror of *2000AD*'s (often post-apocalyptic) stories:

Constituted it as a source of hope for the future. The explanation seemed to be that in the context of the lived experience of these readers, 'bleakness' represented a kind of realism which allowed them to 'keep their imagination alive'. The significance, of course, is that this finding is the exact inverse of the frequently claimed relationship, that the contents of a mass medium tend to reproduce themselves, in the same form, in the heads of audiences, 'violence' breeding violence...and so on (ibid: 15).

Barker is in favour of a return to class perspective in audience research, and in further contrast to those more postmodern theorists who emphasize 'resistance' and 'negotiation' of textual meanings, he rejects the notion that there are infinite ways a text may be decoded. For Barker, the differences between reader responses lie not in how they initially read the text but the conclusions they reach concerning it. Some common threads can be found in all of Barker's work (on film as well as comics) and much of it will prove useful in explaining the methodological design choices made by this study, especially in relation to how the other works that have been presented in this chapter have approached fans, audiences and their texts. A few points are worth highlighting here.

The research undertaken for this thesis intended to answer two seemingly simple questions. How had the posthuman body been (re)presented in superhero comics and what did readers think about posthuman bodies? At this point in the literature review it is possible to assess one of its original contributions to knowledge. As has been seen, while there are a few studies of comics readers this thesis is the first to address British readers of superhero comics, and in

particular, to address reader's response to the questions posed by posthumanism. First, this thesis takes the position that the simple categorization of passive versus active readers will not suffice since it, "...does no justice to kaleidoscopic reactions to the media" (Ruddock, 2001:177), and fails to account for "emotional and physical [embodied] pleasures" (ibid: 152; cf Barker and Brooks, 1999; Williams, 1991). Secondly, this thesis is suspicious of the conspiratorial claim that the producers of media texts have intentionally mounted ideological pressures on the reader, and suggest instead that, as Brown puts it, "it would seem that ideology, like beauty, is in the eye of the beholder" (1997:28). A more detailed critique of ideological analysis will be offered in the next chapter.

READER-TEXT RHIZOMES, OR, READING-ASSEMBLAGES

In Chapter Two the ideas of Deleuze and Guattari were presented as a form of Post/Human theorising. As yet, there have been few attempts to theorise readers and comics in terms of assemblages. Corsten (2012) is a notable exception, although Corsten draws more upon Manuel de Landa's elaboration of assemblage theory and applies it to the form of comic books in a way that is beyond the remit of this thesis. Outside of comics studies, Behrenshausen (2012) has noted a shift in video games studies' from formalist accounts of the games themselves towards an emphasis on active audiences (a shift in focus already familiar from this chapter). Noting the same criticisms of active audience theory we have already encountered, Behrenshausen argues for "an approach to video gaming situations as assemblages...focuses critical attention on the ways in which particular gaming situations privilege certain connections and relations while discouraging others, the ways in which they make certain relations possible and others impossible" (2012: 12). Rizzo (2004) has gestured toward a conception of viewing-assemblages, where affects such as dread and suspense cut across the body of the film to the body of the viewer. Film theorist Patricia MacCormack (2005) has elaborated upon this idea, writing that the viewing-assemblage formed between certain horror films and viewer then is capable of opening new pathways of desire. MacCormack writes that watching such images, submitting to 'cinemasochism' can be a catalyst towards new forms of becoming. MacCormack writes that:

Spectator and screen form a machinic assemblage...It is an arrangement of a body and a surface, but the machine is independent of the materiality of its parts according to

Guattari. It describes the system of connection by which the components perturb and affect each other as they are perturbed and affected. Each perturbation shifts points of intensification and changes the direction of flows, making some areas dense and others dissipate. The territory is remapped, deterritorialisation leading to a re-composition. But the machine structure itself, the act of watching, remains the same (MacCormack, 2005:7)

The machine-structure of comics, the act of reading, also remains the same even as the comic and reader deterritorialise and re-purpose each other. Clearly, there remains much work to be done to elaborate upon these concepts. While the primary focus of the interview data in this thesis relates to the posthuman body, it also intends to add to, and build upon these enquiries by considering the superhero comic and its readers as a reading-assemblage; or to conceptualise readers, texts, producers, as a rhizome, a whole that is not irreducible to its constituent parts.

CONCLUSION

This chapter has demonstrated how approaches to the superhero have been generally split along lines of criticism (as sexist, racist, ideologically conservative and fascistic) and legitimation (as the work of auteurs, as a modern mythology). Either argument contains implied claims about the audience and approaches to audiences similarly hinged on a dichotomy between passive and active audiences.

This thesis aims to fill some of the spaces in our collective knowledge by considering in detail the relationship of the superhero to the wider cultural discourse of the posthuman body. Parallel to this the thesis also undertakes original interviews and analysis to discover how respondents made sense of the Superhuman posthuman body. Taken together these two strands have much to contribute to the understanding of not just superhero comics and their readers, but also the public understanding of Transhumanism. Post/Humanism, meanwhile, is addressed not only as an object of study, but a methodological position. Given the multiplicity of approaches and problematic dualisms witnessed in the literature surveyed in this chapter, the following chapter introduces the concept of the rhizome, arguing that it provides a conceptual model well suited

for working through the research questions of this thesis in particular for conceptualizing the reader-text relationship.

CHAPTER 4: RHIZOMES AND DISCURSIVE PLATEAUS

INTRODUCTION

This chapter introduces Deleuze and Guattari's (related) concepts of the 'rhizome' and 'assemblages' and defends their use as the theoretical lens through which to examine the questions of how the posthuman body has been represented in superhero comics, and what relationship(s) readers have with these depictions. The chapter emphasizes the original contribution to knowledge to be gained by approaching these questions with the conceptual tools offered by Deleuze and Guattari (1987), as well as the ways in which such an analysis differs to the approaches to the superhero and its readers discussed in Chapter Three.

It may be useful to first briefly state the issues, both theoretical and political, at stake in adopting the rhizome as a model of thought and research. For many commentators the question of how posthuman bodies are represented is of great importance. Aligned with this question of representation, however, is the problematic figure of the consumer of such representations. Underpinning these concerns are questions about the ideological - and the extended material effects - of these images and stories. In this chapter I argue for a Post/Human approach to studying the posthuman body in superhero comics and its reception by readers.

As seen in Chapter One Deleuze and Guattari's concepts have had some influence in the development of Post/Humanism. Unsurprising when much of their thought has close ties to Nietzsche's early, prescient brand of Post/Humanism. Tuck points out that Nietzsche's concept of 'drives' is foundational to their project. These 'drives' are, "...those parts of our self that interpret the world...within ourselves...we can be egoistic, hard-hearted, magnanimous, just, lenient, can cause pain or give pleasure" (Tuck, 2010:639). Given this, for Nietzsche as for Deleuze and Guattari, there can be no facts, only interpretations. Moving ahead a century from the Post/Human *Übermensch* to the Post/Human as cyborg it is clear that Deleuzian ideas remain complimentary. As Roden (2010: 32) points out, Deleuze can be seen to

Agree with proponents of cyborg ontology that humans are not unified subjects but effects of generative systems that can be grafted or iterated onto other systems when material conditions allow, generating new kinds of subject effects.

Deleuze and Guattari's philosophical concepts (such as 'desiring-machines' 'assemblages' and 'schizo-analysis') are designed to take, "...the conceptual imagination into a world transformed by science and technology" (ibid). The resonances with Post/Humanism are clear. Rivkin and Ryan's description of Deleuze and Guattari's ideas is worth quoting in full to make the connection explicit:

We are all machines [or 'machinic *assemblages*']...and the institutions we make for ourselves such as the family and the state are also machines that take the desiring production of humanity and process it in useful ways for a particular social regime...in order to work functionally we have to desire efficiently. But the desire is innately reckless and inefficient; an energetics without bounds, and it should be understood as just one segment in larger flows of energy and matter that constitute the world as a mobile, varying, multiple flux with different strata that make up planes of consistency. We exist within such planes as lines of flight that can either escape or be captured and pinned down by signifying regimes, semantic orders that assign us meanings and identities...All such stabilizations or codings constitute territorialisations in that they establish boundaries of identity that restrain temporarily the movement of the flows and the lines of flight...but deterritorialisation is a more powerful force, and everything eventually breaks apart and flows anew, only once again to be recaptured and reterritorialised by another social regime of signification (1998:345)

As such, Deleuze and Guattari invite us to view history as a succession of "signifying regimes, ways of ordering the flows of matter and desiring productions". As will be discussed in more detail below, these "signifying regimes" are not dissimilar to Foucault's notion of 'discourse' as regimes of power/knowledge.

THE POST/HUMAN BODY AS ASSEMBLAGE

Deleuze and Guattari's philosophy of the body questions the binaries that modernist thought has inherited from Cartesian mind/body dualism, in particular questions of the biological/social and agency/structure. Instead they conceptualized selves, and bodies, as, "distributive, both confined to individual bodies and simultaneously connected, overlapping with other bodies, nature and machines" (Gibson, 2006: 189). As such,

A 'subject' for Deleuze and Guattari is re-imagined as a continual 'becoming' neither encased by skin and organs nor defined by static concepts and categorizations...Becoming is identity-in-motion rather than fixed being. It is active, occupying an identity zone without becoming fixated with or fixed to any of its elements. This open system of assemblages-as opposed to closed and static subjects- can be torn down and reconfigured. (Ibid: 190).

Deleuze and Guattari understand the making of bodies, "...to occur on a 'plane of immanence' in which things-objects, beings- are understood not in terms of eternal and immutable essences, but in terms of relations and effects" (Braun, 2004:8). Furthermore, "...Deleuze's bodies are multiple...not simply human bodies...the human body is not, never was, and never can be, simply 'itself'" (ibid: 9). As such, Deleuze and Guattari position the body in a relational field quite different from the discursively passive body that is inscribed by environment and social context. Bodies are instead reformulated as contextual categories, offering a model of embodiment that focuses not on what a body 'is' but on what it can do.

Motivated by positive desire, human bodies have affected their environment through the creation of tools and technologies, organizations and institutions, and symbolic representations; all of which establish myriad new relations with other bodies. Deleuze and Guattari utilize the concept of the Body without Organs (rather than the organism known to medical science; the body-with-organs) to suggest the limits of what a body can do. The Body without Organs seeks to establish such new relations because the more relations a body has the more it becomes capable of doing. These relations can be both physical-with the biological realm -but also non-

physical, deriving from a body's psychology, cultural context, or the social world. These relations affect the body and how the body can affect other bodies.

ASSEMBLAGES

For Deleuze and Guattari bodies are 'assemblages' whose, "...function or potential or 'meaning' becomes entirely dependent on which other bodies or machines it forms an assemblage with" (Malins, 2004; 85). It is not that a body's relations and affects directly determine what it can do. Instead the body and its relations combine within assemblages. A drinking-assemblage might for instance comprise

Mouth-water-cup-thirst

Or a reading-assemblage (discussed in more detail below) might comprise of

Eyes-book-chair-coffee

The relations that make up an assemblage may be drawn from any domain, symbolic or actual, but the assemblage is always dynamic and vary from person to person, body to body, dependent on their own relations. For example some reading assemblages might comprise eyes-glasses-bed-book-and so on in a multiplicity of directions. An assemblage is a becoming rather than a being.

Assemblages link the body to the social and cultural environment, defining its capacities and limits. Never the less, the body always retains the possibility of forming new relations, new assemblages that offer the possibility of becoming otherwise. For as Malins describes it:

The body retains its own impetus...for forming assemblages which allow desire to flow in different directions, producing new possibilities and potentials...brief lines of movement away from organization and stratification and toward a Body without Organs (BwO); in other words, towards a disarticulated body whose organs (and their

movements and potentials) are no longer structured in the same way, or structured at all (Malins, 2004:88).

For human bodies this can mean the masochist's body's breasts become for whipping or that the anorexic's mouth becomes for emptying the stomach, or the skin becomes a canvass for the tattooed body. If a particular assemblage is repeated too often through habit however the components of that assemblage can become stratified and coded. A reterritorialisation occurs. Even so, a body's becoming remains always transitional because, "...a body-in becoming soon re-stratifies: either captured by or lured by the socius...[but]...these territorialisations are also never fully complete: a living desiring body will always form new assemblages that have the potential to transform it and its territories" (ibid). Assemblages can block or allow desire to flow. The linking of one machinic assemblage with another results in what Deleuze and Guattari term 'becomings'.

BECOMING

A becoming is, "...born of a machinic assemblage in which each term deterritorialises the other to become something else entirely" (Hainge, 2006:100). Becoming is "to affect and be affected" (Mercieca, 2010:86), a process of change or movement within an assemblage. For Malins, understanding how machinic assemblages prevent or facilitate (territorialising or deterritorialising) these becomings is an ethical one:

An assemblage becomes ethical or unethical depending on the affects it enables and the potentials it opens up or blocks. It becomes ethical when it enables the body to differentiate from itself and go on becoming-other (Malins, 2004:102).

To take an example from Carstens (2005:56), "in terms of the environmental crisis, the assemblage people might make while becoming-tree, or becoming-animal may expand our sense of interconnectivity with other beings and the land".

In discursive terms assemblages can be formed from a multiplicity of ideas, thoughts, pieces of data and discursive moments. Taken together these assemblages form 'plateaus'. Deleuze and

Guattari describe a 'plateau' as, "any multiplicity connected to other multiplicities by superficial underground stems in such a way as to form or extend a rhizome" (1987:24). It is the concept of the rhizome that this chapter now turns its attention.

WHAT IS A RHIZOME?

It is no easy task to clarify the concept of the rhizome; indeed, part of Deleuze and Guattari's project was precisely to escape clarification. Bruns explains:

Deleuze and Guattari are notorious improvisers of concepts, which are not always meant to be clear, since for them a concept is never exactly "about" something, but is a certain way of articulating complexities, as if to avoid closure or resolution whatever the matter at hand (Bruns, 2007: 703).

Formulated one way the rhizome becomes a model of thought. Deleuze and Guattari propose that the figure for thinking that has dominated Western rationalism is the image of the tree:

These arborescent structures, with their interlocking arrangements of symmetrical and polarized branches-either-or, thesis and antithesis, and division and analogy all serving equally this formalization-have dictated the limits and reductions built into an inherited mode of thinking (Perry, 1993:174).

Unlike trees with their roots and central trunk, rhizomes do not possess fixed origins; "they are tuberous-multiplicitous, adventitious-and connect nonlinear assemblages to other things" (Jackson, 2003:693). Rather than following in unproblematic linearity as in the branches of a tree any point within a rhizome can be connected to any other. A rhizome is non-hierarchical in structure, it has, "no roots, no starting place, no sequence, no ending place; only multiple sources, interruptions, interceptions, foldings, mergings, partings, multiple entry ways" (Tuck, 2010:638). Another key principle of the rhizome is 'asignifying rupture', the continual refiguration of aspects of the rhizome. If a line in the rhizome is shattered at any given spot it may start up again on one of its old lines, or on new lines, or re-erupt on the same path as multiple lines.

For further clarification, here it is reformulated by Sermijn et al:

A rhizome is an underground root system, dynamic, open, decentralized network that branched out to all sides unpredictably and horizontally. A view of the whole is therefore impossible...the most important characteristic of a rhizome is that it has *multiple entryways*...there is no main entryway or starting point that leads to 'the truth'. 'The truth' or 'the reality' does not exist within rhizomatic thinking. There are always many possible truths and realities that can all be viewed as social constructs. The existence of multiple entryways automatically implies *multiplicity*...a multiplicity that does not get reduced to a whole on subject or object level but rather only consists of definitions or dimensions. The notion of unity only appears when a particular dimension (e.g., a particular discourse) takes over (Sermijn et al. 2008:637).

That final point is worth reiterating in a slightly modified form:

With the rhizome, 'unities' can be viewed as temporary takeovers by one story construction with the result that other possible constructions at that moment (for whatever reason) are excluded (ibid: 641).

A rhizome is made up of plateaus, and each plateau is an assemblage. Like the concept of assemblages, the rhizome offers a model of thought and research that is ethical in that it "...opens up life to a *difference* (variation) and *multiplicities*...instead of singular unity of a continuous self, the rhizome allows a body to be multiple...to be a continuous *becoming* rather than a static *being*" (Malins, 2004: 98). The rhizome has the potential to deterritorialise. To cause change. But there is also always a complementary movement that attempts to restore order. To reterritorialise. As such the rhizome is constantly creating a new 'line of flight' along which it has the potential to move into (and onto) new territories:

Lines of flight are created at the edge of the rhizomatic formation, where the multiplicity experiences an outside, and transforms and changes. At this border there is a double becoming that changes both the rhizome and that which it encounters (which

is always, in fact, the edge of another rhizome)...Each of these becomings brings about the deterritorialisation of one term and the reterritorialisation of the other.' As with all such encounters there is an assemblage created, and a double becoming between both aspects of the assemblage (Sutton and Jones, 2008: 11).

It is worth demonstrating at this point what the rhizome can bring to this study's investigation of the representation and reception of the posthuman body in superhero comics.

WHY USE THE RHIZOME?

It was suggested in Chapters Two and Three that the study of superhero comics has often rested on a binary between criticism and legitimation. Even when scholars approached with the figure of the posthuman in mind the tendency was still towards analysing the superhero as a 'good' or 'bad' version of the posthuman. This thesis intends to address this problem by analysing the superhero as rhizomatic assemblages. Although Corsten (2012) has also applied assemblage theory to comic books, their analysis centred on questions of the comic book form constructs spatio-temporality. As such, this thesis is the first to consider the superhero in these terms.

This thesis takes as its rhizome the posthuman body. In order to talk of this it is necessary to consider its representation not just in superhero comics but also those other discursive realms where the posthuman can be found, for example, academic critical theory (Post/Humanism), in speculative futurism, and in scientific discourse (Transhumanism). Rhizomatic thinking opens up different ways of asking, "...how to assess the social imaginary that produces such representations" (Braidotti, 2002:174). In adopting the concepts of the rhizome and assemblages this thesis is bound to acknowledge the multiplicity of approaches or the multiple entryways into the rhizome of the posthuman body. Whether the analytic tool is structuralist or post-structuralist, all are capable of producing (tracing) their own discourses on posthumanity. This thesis thinks with Braidotti, who in turn

Think(s) with Deleuze that neither science fiction nor in any other text is there a master plot to be unveiled or revealed by the simultaneous deployment of world history and individual psychic processes. There are only fragments and sets of hazard-meeting and

ad hoc intersections of events, Deleuze's points of crossings, rather than Freud's libidinal predestination or Marx's teleological process (Braidotti, 2002:13).

This thesis investigates the relations between the posthuman body, comic books and the responses of readers to these representations. Given the heterogeneous nature of these three topics, the rhizome provides an excellent conceptual tool, for considering these issues simultaneously rather than placing them within an ontological hierarchy. As a model of culture the rhizome resists the organizational structure of the root-tree system, chronological causality and the search for the originary source. Rather than a narrativising history and culture the rhizome presents them as map of influences and events with no specific cause because the rhizome has no beginning and no end, "...it is always in the middle, between things, interbeing, intermezzo" (Deleuze and Guattari, 1987:25). It would also be able to consider cultural representations as being on the same plane as economic, material and aesthetic factors, but not beholden to any of these as the final explanation for, or hidden meaning of such representations.

RHIZOMES AND DISCOURSES

As stated above, Deleuze and Guattari describe the rhizome as made of plateaus. Honan (2007) elaborates on this concept, helpfully suggesting that each plateau composing the rhizome be considered as 'discursive plateaus'. This thesis suggests that these discursive realms/plateaus are best considered through a Foucauldian lens. To fully clarify this it is first worth clarifying what is meant by discourse and how this too differs from the concept of ideology. Graham (2002) describes how Foucault's

Models of 'archeology' and 'genealogy' privilege representation, language and imagery and recognize the importance of popular and scientific discourses in the formulation of hegemonic notions of what it means to be human. Foucault argues that 'human nature' is historically conceived and emphasizes the symbiosis between the centre and peripheries of cultural discourse in constituting what counts as authoritative 'truth' about identity (2002:39).

Furthermore,

Foucault's method consists of trying to identify the specific interstices of discourse and social organization and how these fuse to create particular *technologies* of the self...Foucault's analysis sets out to subdue 'the kind of history that is concerned with the already given, commonly recognized 'facts' or dated events...in favour of a critical approach that defies a totalizing or authoritative telos... to question what is 'natural' and, particularly in later work as the genealogical replaces the archaeological, to enquire into the actual mechanisms by which 'knowledge' produces 'normality' (Ibid: 43).

In short, "...there is no 'natural' or a historical self awaiting liberation from oppressive social structures, or a subject who exists independent of constitutive discourses" (Graham, 2002:42). As Currier points out, Deleuze and Guattari work with a Foucauldian understanding of power as operational, working through historically specifically discursive regimes. However, these discursive regimes (representational and material) are elements of the assemblage, "...and, as such, are implicated in the subsequent forms and arrangements of that assemblage" (Currier, 2003:335), rather than transcendent structures. Where Foucault views the subject as always created and delimited by power, the concepts of assemblages and rhizome encourage us to describe the subject as a machinic assemblage, allowing us to see past the illusory subjectivity to the fluidity of flows and processes.

This has particular implications for the research undertaken in this thesis. As Barker has noted the last 30 years have produced a 'motley domain' of sometimes-conflicting theories and approaches yoked under the rubric of 'discourse analyses. Barker warns that this sometimes amounts to a reiteration of ideological analysis, but termed 'discourse analysis': "it is possible to find repeated instances of words assuming specific kinds of causal relations at work within culture: people are apparently 'constructed', 'impelled', constituted', 'interpellated', and so on" (2008:155). The result of this is the generation of 'images of the audience' that remain untested, and are not dissimilar to the image of the passive receiver of media discussed in greater detail in preceding chapters.

However, discourse, at least in the Foucauldian sense that interests us here, should not be understood as the same thing as ideology. As Hall (198:94) suggests, "...the classical formulations of base/superstructure which have dominated Marxist theories of ideology represent ways of thinking about determination which are essentially based on the idea of a necessary correspondence between one level of a social formation and another". Discourse theory, by contrast, does not recognize any 'necessary correspondence': "...the notion essential to discourse- [is] that nothing really connects with anything else" (ibid). So that, "even when the analysis of particular discursive formations constantly reveals the overlay or the sliding of one set of discourses over another, everything seems to hang on the polemical reiteration of the principle that there is, of necessity, no correspondence" (ibid). In the rhizome, by contrast, everything is connected to everything else, but these connections are multiple and shifting, and not reducible to a central trunk such as an economic superstructure. A rhizo-analysis draws attention to just such "overlays or the sliding of one set of discourses over another", viewing these instances as forms of re and de-territorialisation.

Hall writes of discourses taking shape at particular periods, arguing that, "they leave traces of their connections, long after the social relations to which they referred have disappeared...[furthermore] these traces can be re-activated at a later stage, even when the discourses have fragmented as coherent or organic ideologies" (ibid: 111). Thus, for Hall, such a discursive 'chain' becomes the site of ideological struggle:

A particular ideological chain becomes a site of struggle, not only when people try to displace, rupture or contest it by supplanting it with some wholly new alternative set of terms, but also when they interrupt the ideological field and try to transform its meanings by changing or re-articulating its associations, for example, from negative to positive (ibid: 112).

In some sense this is what the history of the comic book posthuman offers. An unbroken chain of posthuman representations put to very different uses and given different meanings at certain times and by certain authors. Yet 'traces' remain, hence the comic book posthuman body still regularly manifests itself as a white, male, muscular body. We do not need to accept the notion of an 'ideological struggle' in an essentialising sense to see the value of the concept to cultural

historic approach to the discourse of posthumanism. Indeed, it is not far from the concept of de/re/territorialization discussed above.

Obviously, a rhizo-analysis of superhero texts and readers does not involve forming structuralist arguments about the 'truth' or ideological 'meaning' of them. It is not a 'tracing' but a mapping. Such an analysis does not start out knowing what it is looking for, or even knowing how to look for it. As O'Sullivan reminds us, "...the rhizome is anti-hierarchical and a-centred", therefore, "...no single organising principle predetermines the consistencies and compatibilities between the network of its elements" (O'Sullivan, 2002: 84). As such, contra ideology, we cannot assume:

That there are real interests [organising principles] that are concealed: that women, say, *really* want to be liberated but are duped by ideology. Ideology also has to assume some *normative* form of the individual who awaits liberation from the imposed illusions of culture...we cannot assume real interests, nor some pre-social and essential individual that we might discover underneath power and images (Colebrook, 2002:92).

Avoiding this assumption involves the difference between mapping and tracing in social research.

MAPPING AND TRACING

Mercieica and Mercieica (2010) demonstrate how the influential model of emancipatory research has become dominant in disability studies, "...but without the negotiation and questioning that brought about their initial development" (2010:85). As a result:

The researcher accepts or inherits the emancipatory paradigm as the correct way, thereby settling discussion rather than provoking it....terms such as the social model, emancipatory research, empowerment, medical model...have become fixed structures, which shape how we know and think about disability....the researcher is, therefore, tracing over structures that are pre-determined (ibid).

As a result of this, they argue, the disability researcher is closed off to things that its current form would consider 'side issues' (ibid). This is what Deleuze and Guattari mean by 'tracing'. In the example above, "...this amounts to a tracing of disability, an understanding that perpetuates how we understood it before" (ibid: 87). Although this example is taken from disability research it can just as well be applied to other schools of ideological analysis. Consider those works discussed in Chapter Three that applied ideological analyses to superheroes. In Deleuze and Guattari's terms these researchers reduced the rhizome to an arboreal model with a central explanatory trunk. As such:

The tracing has already translated the map into an image: it has already transformed the rhizome into roots and radicles. It has organized, stabilized, neutralized the multiplicities according to the axes of significance and subjectification belonging to it. It has generated, structuralized the rhizome, and when it thinks it is reproducing something else it is in fact only reproducing itself (Deleuze and Guattari, 1987: 13).

A rhizo-analysis of the posthuman body is a marriage of form and content. An experiment in becoming informed by an epistemology that, "...does not fetishize completion, closed circuits, or discrete processes" (Tuck, 2010:641). As O' Sullivan puts it, thinking about the study of culture as rhizome implies, "...not a different kind of *reading* but a *transformation*". Like Science Fiction (or superhero comics):

We enter a world populated not by people and things but by events, *haecceities*, and intense thresholds. The human-as organised, signified, subjectified-disappears. Or at least becomes little more than a strategic position (a territory), a launch pad into other worlds (O'Sullivan, 2002:86).

A rhizomatic approach to Cultural Studies becomes, "...a 'voyage of discovery', a journey which produces the terrain it maps" (ibid: 84). Deleuze and Guattari urge the researcher to, "...Lodge yourself on a stratum, experiment with the opportunities it offers, find an advantageous point on it, find potential movements of deterritorialisation, possible lines of flight, experience them" (1987:161). This involves a move away from the 'interpretation of culture' and towards what O'Sullivan calls, "...a *pragmatics* which allows for a mapping of connections between different

objects and practices, events and assemblages” (2002: 81). As Deleuze and Guattari themselves put it, “...a rhizome ceaselessly establish connections between semiotic chains, organizations of power, and circumstances relevant to the arts, sciences, and social struggles” (Deleuze and Guattari, 1988:7). The posthuman body then can be understood as a rhizome, made up of discursive plateaus, or assemblages formed between art, science and society.

Using these conceptual models to consider the posthuman body represents one of the first new contributions to knowledge offered by this thesis. While many approaches to the superhero have fallen along an axis of criticism or legitimization, understanding posthuman bodies as assemblages moves analysis away from understanding what they are, to what they can do. The Superhuman is not a totality in which the components are fixed. As an assemblage those same components can play different roles in diverse assemblages. Relations between components are thus only contingently obligatory.

In Deleuze and Guattari’s own words:

Assemblages have elements (or multiplicities) of several kinds: human, social, and technical machines...We can no longer even speak of distinct machines, only types of interpenetrating multiplicities that at any given moment form a single machinic assemblage (1987:36).

The meaning, function or identity of any given assemblage emerges only through the interaction between its parts. No single component can be said to be the essence of the assemblage because any component is itself a multiplicity rather than a unified object. This thesis marks the first concerted attempt to apply these concepts to the comic book superhero. It argues that the posthuman body is best understood as a rhizome formed by the multiplicity of connections between the assemblages, or discursive plateaus, of Post/Humanism, Transhumanism and Superhumanism. In so doing the thesis presents for the first time an analysis of how and why the posthuman body has taken on particular, contingent forms at various historical junctures. Remembering that assemblages are formed by and from relations between material entities like human bodies, comic books or technologies, as well as expressions about these material entities in the forms of laws, ideologies and symbols, this thesis highlights both the connections and

ruptures between the discursive realms of Trans, Post/ and Super-Humanisms. The thesis hopes to highlight not what these assemblages 'are', but what they can do when they connect with other assemblages. What happens, for instance, when the posthuman body plugs into a war-machine, a countercultural machine, or a corporate machine? As Deleuze and Guattari ask:

Given a certain effect, what machine is capable of producing it? And given a certain machine, what can it be used for? Can we possibly guess, for instance, what a knife rest is used for if all we are given is a geometrical description of it? (2000: 3).

COMICS STUDIES AND THE RHIZOME

I suggest that comics studies' lack of disciplinary boundaries can potentially be one of the great strengths of comics studies, facilitating the same sort of generic and even stylistic promiscuity displayed by the medium itself. Rather than fuzzy disciplinary borders making comics studies a 'critical backwater', comics studies:

Might take part in the on-going and essential re-examination of how, by whom, and under what auspices knowledge is produced in academe.... [With a] commitment not simply to multi- but to interdisciplinarity (Hatfield, 2010:14)

As such, this thesis promotes Deleuze and Guattari's concept of the rhizome (and their ideas generally) for use in comics studies. Deleuze is deeply sympathetic to the notion of interdisciplinarity, and speaks of a, "...fundamental rapport between the arts, sciences and philosophy. There is no privilege of one discipline over the other. Each is creative" (cited in Perry, 1993: 181 n17). The concept of the rhizome is but one way of expressing this. As Ramier and Varshney point out in their edited volume of essays on the rhizome and interdisciplinarity-

just as a rhizomatic plant grows multiple roots and offshoots extending in all directions, interdisciplinary work is constantly redefining its structure and proposes new and original ways of carrying out research...'multidisciplinarity' and 'interdisciplinary'...signal an important and tangible evolution of the way that academic research is undertaken in the new millennium: dominant disciplinary organization is challenged as issues falling

across several disciplines become the focus of interest (Ramiere and Varshney 2006: vii-viii).

As well as a conceptual model of interdisciplinarity the rhizome may also prove useful to comics studies as a paradigm for the inevitable “cross hybridization” between the spheres of fan appreciation, essayistic criticism and academic criticism endemic to comics studies (Fischer, 2010). More pressingly for this particular thesis, the rhizome allows for drawing connections between the disciplinary realms of Sociology, Audience Studies, Post/Humanist theory, History and Comics Studies. It is possible to suggest that this thesis falls under the broad category of Cultural Studies though as Seidman has noted, any Cultural Studies/Sociology binary, “...is unstable and perhaps collapses into incoherence if pressed more intently” (cited in Inglis, 2007:100). That being said there are warnings that can be heeded arising from the debate between the two.

The first is an alleged trend in purely sociological approaches to culture, “...placing particular cultural phenomena in wider ‘social systems’, imperialistically reducing ‘culture’ to an apparently more primal and fundamental ‘social’” (ibid: 106). As Brienza puts it, “...it is as if the art object itself is invisible; sociologists look straight through it and see only a collective mode of production and the various constraints upon it” (Brienza, 2011: 115). Adopting a rhizomatic approach to culture addresses those sociological concerns but without reducing the aesthetic to the social. A political-economic understanding of the Superhuman body, while interesting, represents just one entryway into the rhizome.

Alternatively, the second warning concerns the equally problematic tendency in Cultural Studies to reduce the social to the aesthetic. As Inglis puts it:

The whole world is reduced to texts and concomitant matters of reading and interpretation, whether those interpretations of texts (as in ‘critical readings of films and pop music lyrics) or the analyst’s interpretations of other people’s interpretations of texts (as in studies of the ‘readings’ of texts engaged in by particular groups in popular cultural audiences) (Inglis, 2007:112).

Inglis highlights that many sociological critics take issue with the 'arbitrary' nature of these readings, and such research's lack of systematic evidence and 'historical sense'. Again, this thesis has chosen to utilise the concept of the rhizome as a model of thought that is able to journey across the plateaus that make up the rhizome of the Superhuman body; addressing questions of organisational and industrial constraint, but also wider socio-historic trends these constraints were connected to ("as a machine of a machine"). These trends and constraints in turn affected the aesthetic; it is important to understand that even as superhero comics are produced in connection with wider social discourses and industrial developments they 'refer to' or 'signify' themselves also. In particular their own fictional (and often meta-fictional history). These fiction-assemblages connect with comics' fans to form reading-assemblages of, which in turn connect with the body social. It is to readers that this chapter now turns.

THE RHIZOME AND READER-TEXT ASSEMBLAGES

The preceding section introduced the concepts of rhizomes and assemblages, arguing that using these models to consider the development of the posthuman body in superhero comics answered my first research question and represented my first original contribution to knowledge. In order to fully understand this process however it is also necessary to consider comic book readers. This leads to the second research question: what relationship do readers have with depictions of the posthuman body? This data itself would be an original contribution but alongside those findings the thesis also offers an initial reconceptualization of the reader-text relationship in Deleuzo-Guattarian terms.

Superhero comic books may be seen as engaged in a dialogic encounter with their readers. As Barker and Brooks have found, "...the most critical audiences are likely to be those who know the genre, and have expectations based on a history of involvement" (1999:15). Moreover, the lines between producer and consumer in comic book culture have always been permeable. As was shown in Chapter Three, comic book fans moved quickly into the comic book industry. Brown suggests that we ought to reconsider the relationship between, "...creators and the audience as potentially sympathetic rather than as always a struggle for power and meaning" (1997:21), indeed, "... the comic book industry, perhaps more than any other mass medium, represents a negotiation of textual meaning between the producers and consumers" (ibid: 54).

For Barker there is a 'symbiotic relationship' between producers of formulaic narratives (such as superhero comics) and their consumers:

A symbiote is an organism which lives in a relationship of mutual dependence with another. Although it is possible to study it separately, any full account of its structure and its behaviour depends upon studying it as an organism-in-relation (1989:129).

Given Barker's staunch empiricism and apparent antipathy towards what he describes as 'academic Vogon' in cultural studies it is perhaps surprising that a concept he describes should facilitate an elaboration of Post/Humanist theory. However, this thesis would like to elaborate on Barker's notion of the symbiotic relationship between comics readers and producers by reframing it in Deleuze and Guattari's terms as a machinic assemblage. A rhizome formed by the linking of a reader-assemblage to a comic-book assemblage. If theories that conceptualise the text/reader relationship as an antagonistic binary opposition follow an arboreal model and desire to reveal what text or audience IS, then a rhizomatic model asks what can the comic book-reading assemblage DO? What new becomings does such an assemblage allow, and how are these becomings de and reterritorialised by signifying regimes?

CONCLUSION

This chapter introduced some of the ideas of Deleuze and Guattari (1987), highlighting that of the 'machinic assemblage' and 'rhizome'. It argued that these concepts were of particular use in helping to answer the two questions this study hoped to answer: how has the posthuman body developed in the form of the Superhero? And what sense do readers make of posthuman bodies?

The representations of the posthuman body and their consumption by readers have regularly been reduced by arboreal approaches that emphasize a single explanatory trunk. This process was referred to as 'tracing'. The aim of this thesis is a 'mapping' of the posthuman body. The rhizome suggests a model of thought and research that is open and non-hierarchical; an approach that encourages understanding the superhero and its readers from multiple perspectives, engaging with their heterogeneous nature and not reducing them to a single,

totalising explanatory narrative. The next chapter outlines how the methodological choices made for this project still retain recognisable features, albeit put to work in a different way.

CHAPTER 5: METHODS AND METHODOLOGY

INTRODUCTION

The previous chapters surveyed the literature on comics, posthumanism, the body and audiences. The preceding chapter introduced the concept of the rhizome, presenting it as a conceptual tool that moves away from many of the problems raised by the approaches discussed in the first chapters, particularly in relation to comic book superheroes. It was suggested that rather than adopting broadly humanist approaches which emphasised either what texts did to readers (readers) or what readers did with texts (activity/resistance) a Post/Humanist approach might begin by considering what they do to each other, that is, what becomings are facilitated by the formation of the reader-text assemblage. This thesis is now able to synthesise these various strands and begin suggesting which methodological approaches would best help to answer the two research questions, which are:

1. How has the figure of the posthuman been represented in comic-book narratives?
2. How do readers make sense of these posthuman bodies?

To answer these questions my over-arching theoretical model was that of the rhizome. Never the less, the tools for navigating the journey through the rhizome of the posthuman body were recognizable and tested. To answer my first question a Foucauldian discourse analysis built upon the framework suggested by Hall (2004) was applied to the posthuman body of the superhero comic. This identified three overlapping discursive formations of the posthuman body; these were the Perfect Body, the Cosmic Body, and the Military-Industrial Body. This analysis of the Superhuman body was then supplemented by reviewing how the other forms of posthuman discourse - Post/Humanism and Transhumanism - developed alongside the Superhuman. This involves a broad range of historical and documentary analysis, and necessarily involves a wide range of materials (e.g. comics, policy documents, scientific texts, and so on). The resulting rhizo-analysis is presented in the form of a 'cultural history', which presents each of these discursive formations and places them within their historical and aesthetic context.

To answer the second question I conducted twenty-five semi-structured interviews, each lasting

two hours, on the subjects of both superheroes and human enhancement. These interviews were then analyzed via open-coding. The codes were then further analyzed until they were broken down into core categories. These categories were then applied to the competing discourses of the posthuman body presented in the cultural history in order to consider points of divergence and connection between these figures and reader's responses to them.

WHY CHOOSE A QUALITATIVE APPROACH?

Given the research questions and theoretical/philosophical interest of the project it is suggested that a broadly qualitative methodology would be most useful and appropriate, stressing as it does, "...'quality' not 'quantity', that is, social meanings rather than the collection of numerate statistical data" (Miller and Brewer, 2003:238). This is to say that it sought new insights, to ask questions and to generate ideas and hypothesis (Robson, 2002:59) about the posthuman body. This thesis might even be thought of as a case study where the 'case' is the posthuman body. Case studies typically combine, "...a range of data collection techniques including, observation, interview and documentary analysis" (ibid: 89). As such, the details of the research design tend to 'emerge' during the collection and analysis of the data-which this thesis argues includes the collecting and writing up of literature reviews in the previous chapters.

The two main research questions invited both a textual-analytic, comics based component in the first instance, and a qualitative enquiry into reader responses in the second. The means by which these might be attempted are, however, numerous. In choosing which methods and analytical tools would be most appropriate to this research it is necessary to highlight the critical-philosophical mode that this thesis will be engaged in. In proposing a design utilizing multiple methods of qualitative data collection and analysis, this thesis attempted to ensure that the research is able to evolve as the data collection proceeds (ibid: 87). Moreover, this flexible design seemed in keeping with the focus on multiplicity and hybridity that runs throughout this thesis, being both the object and its subject, and found in both its nomadic wanderings across disciplinary boundaries and its bricolage approach to theory. The use of multiple methods would, it was hoped, lead to the creation of rich and deep data, to capture as much as possible of the social meanings of the posthuman body by way of 'thick description'.

A CULTURAL HISTORY OF THE POSTHUMAN BODY

The first step towards answering the research questions involved analysis of the development of the posthuman body in the form of the comic book superhero was performed primarily as a cultural history. 'Cultural history' is said by its supporters to, "...best combine the disciplinary strengths in writing history with the ferment of ideas associated with what might be loosely termed Critical Theory" and stresses the, "...importance of situating texts in a variety of historically informed contexts" (Luckhurst, 2005:1-2) For this project, that involves not just general social and political contexts, but also an attention to how the posthuman manifested at these times which situates them within an always-shifting network of forces with, "...different emphasis at different times" (ibid: 6). This undertaking can be considered as the first original contribution of this thesis. As seen in the literature reviews, although a handful of articles make the connection, there has yet to be an analysis of the relationship between the superhero and the posthuman that takes such a wide-angle approach. Furthermore, the typology of the superheroic posthuman body (Perfect, Cosmic and Military-Industrial) should, it is hoped, be of great heuristic value in considering the transformations and ruptures in the discourse of the posthuman body.

One advantage of the cultural historic approach is its ability to highlight posthuman discourse (that is, discourse as a system of representation) as a matter of both language and practice:

Discourse...constructs the topic. It defines the way that a topic can be meaningfully talked about and reasoned about. It also influences how ideas are put into practice and used to regulate the conduct of others (Hall, 1997: 72).

In the case of the discourse of posthumanism, this involves highlighting not just its linguistic representations, its semantic and semiotic forms, but also material practices. For example, the Holocaust of World War 2 provides a stark example of a form of posthuman discourse (e.g. Hitler's notion of a 'Master Race') manifested as a material practice (e.g. eugenics), discourse written upon the body.

Mixing a discourse analysis with a cultural historic approach makes sense because as Hall points

out, discourse is already 'historicized' by Foucault. So for example:

Mental illness was not an objective fact, which remained the same in all historical periods, and meant the same thing in all cultures. It was only within a definite discursive formation that the object, 'madness', could appear at all as a meaningful or intelligible construct...and it was only after a certain definition of 'madness' was put into practice, that the appropriate subject-'the madman' as current medical and psychiatric knowledge defined 'him'-could appear (ibid: 74)

For 'mental illness' and 'madness' we could replace 'posthumanism'. A cultural-historic approach then, informed by rhizomatic thinking, would trace the discourse of the posthuman body across seventy years of superhero comics, placing these discourses within wider discursive formations of posthumanism.

In writing a cultural history, the emphasis is shifted from trying to determine the meaning of text as if it, "...existed as an entity which has already been formulated within the text" (Murphy, 2004:124), but rather to, "...reveal the conditions that bring about its various possible effects" (Iser, cited in ibid). Secondly, taking the moderate view that, "...not all interpretation is over-interpretation" (ibid: 131) this cultural history proposes to 'read' representations of the superhero body in terms of their socio-historic and industrial context and without recourse to presumptions about their ideological or psychological effects on the reader.

VALIDITY AND RELIABILITY IN THE DISCOURSE ANALYSIS

A discourse analytic approach (although also a rhizomatic approach), if it is to be taken seriously, needs to make clear why it should be trusted (Barker, 2008). This issue is compounded by the fact that there is no universally agreed upon method for performing discourse analysis. Having qualified this though I find it useful to paraphrase Hall's elements for the study of the discourses of madness, punishment or sexuality, substituting 'posthuman bodies' for those terms. In this formulation, "any study of the discourse of [posthuman bodies] would have to include the following elements:

1. Statements about [posthuman bodies] which give us a certain kind of knowledge about these things.
2. The rules which prescribe certain ways of talking about [posthuman bodies] and exclude other ways-which govern what is 'sayable' or 'thinkable' about [posthuman bodies] at a particular historical moment.
3. 'subjects' who in some way personify the discourse...with the attributes we would expect these subjects to have, given the way knowledge about the topic was constructed at that time;
4. how this knowledge about the topic acquires authority, a sense of embodying the 'truth' about it; constituting the 'truth of the matter', at a historical moment;
5. the practices within institutions for dealing with the subjects...whose conduct is being regulated and organized according to those ideas;
6. acknowledgement that a different discourse or *episteme* will arise at a later historical moment, supplanting the existing one, opening up a new *discursive formation*, and producing, in its turn, new conceptions of [posthuman bodies], new discourses with the power and authority, the 'truth', to regulate social practices in new ways (from Hall, 2004:347)

As mentioned above a cultural historic approach necessitates addressing all of the above, placing a particular emphasis on how the discourse of the posthuman body has been transformed within superhero comics and institutionally. In the preceding chapter it was said that the rhizome consists of plateaus and that these plateaus could be considered as discursive realms. As Sellers and Honan (2007) point out:

Rhizomatic research points to new understandings of the interaction between discursive systems within any rhizome. Discourses *do not operate as straight lines through a text: rather, they merge, connect, and cross over each other*. We, as rhizo-analysts, can map discursive journeys through a text and such mappings can illuminate the moments of convergence, when connections allow reason (able) readings of contradictory and conflicting discourses. This provides a constructive and transformative approach to discourse analysis, perhaps replacing that kind of analysis that has previously focused on the deconstruction rather than transformative possibilities that are produced through a re-construction. (Sellers and Honan, 2007: 153 Italics added)

With this in mind I proposed that the rhizo-analysis of superhero comics take the form of a cultural history that situated the aesthetic and narrative developments of the superhero genre within a wider socio-historic vision of the posthuman.

CHOOSING AND FINDING A 'DEFENSIBLE CORPUS'

At this point it is worth reiterating Barker's (2008) earlier question about why such an analysis should be trusted, and his suggestion that this notion of 'trustworthiness' be taken as the qualitative equivalent of the quantitative researchers' 'triad' of validity, reliability and generalizability. Having decided on a cultural historic approach I was then faced with deciding which texts to build it upon. This was no simple task. As the 'unruly mass of source materials' (Miller and Brewer, 2003:140) potentially available to historic researchers requires that serious consideration be paid to subject matter and interests of the research in identifying and selecting the most appropriate sources. Barker has highlighted several problems with works that claim to perform some form of discourse analysis. His emphasis on the need for a 'defensible corpus', that is, that there are defensible grounds for the selection of certain texts and readers. In relation to selecting texts for the cultural history, this thesis is able to provide "independent evidence of the cultural importance of a corpus" (Barker, 2008:165) in the form of readers and critics' polls (see Appendix), as well as a survey of the recurring texts in other scholarly works. These sources add up to what can be described as a 'comic-book canon'.

To this end I selected those comics that are generally agreed, by fans and commentators, to be the most indicative of their particular comic book eras. These eras, or 'ages', are the subject of some debate as to where they officially begin and end (cf Coogan, 2006). For the sake of ease this thesis will work from a slightly modified version of Coogan's schema of comics ages. These modifications have the heuristic value of including, for example, an 'Antediluvian Age' essential for contextualizing the development of the posthuman figure as 'menace' in the Antediluvian Age before becoming the smiling superhero of the Golden Age (Andrae, 1980). In addition, Coogan's Iron Age has been divided in two to include what some refer to as the Dark Age (Voger, 2006)) of comics, which I have dated roughly from the publication of two key deconstructions of the superhero archetype, Moore and Gibbons *Watchmen* and Frank Miller's *The Dark Knight*

Returns. These ages are as follows

Antediluvian Age: 1818-1938-beginning with Frankenstein and moving through pulp heroes like Tarzan (1912), Doc Savage and The Shadow

Golden Age: 1938-1956-beginning with Superman

Silver Age: 1956-1971-beginning with the re-imagined The Flash

Bronze Age: 1971-1980- beginning with Marvel and DC's developing 'social conscience'

Iron Age: 1980-1986- beginning with the first appearance of the New Teen Titans

Dark Age: 1986-1997-beginning with Watchmen and Dark Knight Returns

Modern Age: 1997-present-beginning with Kingdom Come

With any study of comic books there are questions of availability. For instance, an original copy of the first issue of *Action Comics* (Superman's debut) recently sold for one million dollars at auction (news.bbc.co.uk/2/hi/8529504.stm). As even the most generous PhD funding rarely extends to this kind of purchase, research must instead proceed from reprinted materials, which are, fortunately, widely and relatively cheaply available. Titles such as DC's *Showcase* series and the *Marvel Essentials* range collect together phone-book thick black and white reprints of Golden and Silver Age comics, while the slightly more expensive editions reprint the stories in color. These are valuable resources, often reprinting upwards of twelve issues per collection, amounting to at least one year of any given title's history. Unfortunately, they do not reprint the advertisements, editorials and letters pages that would have been found in the original comics, so secondary sources must be relied upon to elucidate these areas (Wright's work, for example, draws heavily on the letters pages of Silver Age Marvel comics). The converse is true of contemporary comics. Individual issues are relatively easy to access and purchase, while major storylines are reprinted in full-color trade paperback form almost as soon as they have finished sequential publication. The final list of titles can be found in the appendix.

SECONDARY SOURCES AND ANCILLARY MATERIALS

Barker (2010) has observed a shift in film studies in recent years away from purely text-interpretive approaches to film. This has included not just an acknowledgement of nature of texts as culturally and historically situated and the growth of audience studies, but also an, "...acknowledgement of the importance of (what have variously been called) secondary, ancillary or satellite texts which shape in advance the conditions under which interpretations of films are formed" (2010:1). While the film retains a, "...relative ontological priority over these materials...their relation to it is to function by proposing reasons and strategies for preparing to go and see it-or for reflecting subsequently on the nature of the experience obtained" (ibid: 2).

The incorporation of ancillary materials into the analysis has been described as a, "...contextual and materialist approach" (Staiger, cited in Mathjis, 2003:29) to reception studies. For instance, Mathjis' essay examines how critics responded to the trend in horror films since the 1970s, especially those of director David Cronenberg, to depict, "...the human body in crisis...as the site of violent transformation" (ibid: 31). Mathjis demonstrates how critics appropriated real world events to construct a critical discourse that positioned Cronenberg's *The Fly* as a film 'about' AIDS. For Mathjis, these types of 'topical' and 'rhetorical' practices, "...link a film to significant contemporary cultural issues...[and] use those issues to bind together arguments in the interpretation so as to make them culturally relevant" (ibid: 30). These insights are helpful in that they draw attention to the fact that the text's meaning is not fixed, but immanent. That critical discourse intersects with the same cultural and historic forces as the texts themselves. More intriguingly, the notion that topical and rhetorical practices both legitimate and explicate a text for readers may prove useful when considering comics readers, whose knowledge will not just be shaped by critical (in both populist and scholarly senses) discourse about them but also their immersion in continuity. The discourse of the posthuman body can be found not just in the comics themselves, but also the ancillary materials surrounding it, including guide books, posters, film and television adaptations and academic and popular criticism. Such works must also be considered as part of the same socio-historic moment and posthuman discourse - part of the same rhizome - as the texts they critique. To quote Iser once more, "...the interpreter's task should be to elucidate the potential meanings of a text, and not restrict himself [sic] to just one"

(quoted in *ibid*: 133). This thesis understands other critical interpretations of texts as just such 'potential meanings', or 'entryways', in the language of the rhizome.

IDENTIFYING DISCURSIVE FORMATIONS

Just as the texts chosen needed to be defensible, so did their analysis. To address questions of a methodological rigor and 'uncheckability' (Barker, 2003:317) in identifying discursive formations. Barker and Brooks provide an excellent illustration of such 'uncheckability'. They critique a 'not atypical essay' on DC Comics' *Death of Superman* storyline from 1993. Barker and Brooks write that in said essay:

[Death of Superman] becomes an 'example' of postmodern culture. The story cannot possibly offer any resistance to... [the critic's] account, because he does not so much analyze them, as retell them in terms of his already known theory. So, when he tells us that 'the contest between Superman and Doomsday is often rendered in 'violently homoerotic terms', this is not the result of an analysis of the story's rendition, but of a 'naming' of things that could as well be named in other ways...the relation between evidence and theoretical claim is limp... [And] do not seem testable by any regime of investigation we can imagine (Barker and Brooks, 1999:117)

Barker and Brooks offer several correctives to avoid such empirical laxity. Firstly, they propose that all discourse analysis can only make "provisional claims about the presence of discursive practices" (*ibid*). More specifically, Barker and Brooks offer three tests they feel should be met before a researcher identifies a discursive formation:

They must draw attention to clearly defined aspects of the materials, and in attaching significance to them, (a) must make clear how these were discovered within the materials, (b) will be persuasive only to the extent that they can explain more features of the materials than other approaches, and (c) crucially, must make possible triangulations with other, independent kinds of evidence (*ibid*: 117-118)

The *Death of Superman* essay fails these tests because it did not demonstrate that the textual

features were, "...‘read-able’ as signifying postmodern discourses", nor demonstrate their presence as a result of the, "...concrete history of DC Comics or the comics market situation or the nature of the readership" (ibid: 118). Chapter One showed how these failures are an unfortunate and recurring (though improving) trend in academic work on superheroes.

It may be suggested that these corrective measures can both enhance the empirical validity of the research and still be commensurate with its rhizomatic approach. As was already noted, the emphasis on the provisional nature of discursive formations is essential to rhizomatic thinking, which encourages "...*explicitly* pointing out to the reader that the text one presents...is but one of the many possible presentations (or entrances)" (Sermijn et al, 2008: 646). This has resonances with Barker’s ‘naming of things that could as well be named in other ways’ quoted above.

Another of Barker’s measures of trustworthiness for discourse analysis is “taking responsibility for implied claims”. As Barker writes, in the humanities these are typically claims about reception: “Who are the ‘people’ who will receive the discursively organized ‘messages’ which the analyst has disclosed, and what is the possible impact of these”? (Ibid: 13). This thesis addresses this problem directly by talking with readers of superhero comics, the details of which are outlined below.

GATHERING RESPONDENTS

The interview data for this thesis consisted of 25 interviews, each lasting two hours. To begin with posters designed by myself (see Appendix 1) were placed in several comic shops within a fifty-mile radius of Stirling. The Stirling University Comics and Fantasy Society was also approached. The intention here was to create a ‘snowballing’ method, encouraging respondents suggest other suitable respondents for the research (Bernard, 2000). In practice however gathering respondents proved a surprisingly slow and arduous process, with only two extra participants gained this way, twelve in all. After conducting the first batch of interviews the call for respondents (Appendix 2) was placed online via the blog of the Edinburgh Comics Society, the Edinburgh Hacklab (resulting in the only self-identified Transhumanist) through Twitter and my personal blog. This yielded seven more participants. Of the remainder, three were already

known to me, and three were asked to take part after chance conversations revealed them to be comics readers.

In all twenty male respondents took part and five female. Ages ranged from 20 to 45. This roughly matches up with comics demographics in terms of both age and gender. Statistics on comics readership are difficult to come by. One exception is Simba information's report, *Overview of the U.S. Comic Book & Graphic Novel Market 2010-2011*. Alas, this report retails for \$1,295, far outside the funding available to this research. Moreover, it only details the American market for comic books, and statistics for Britain may be quite different. Never the less, and accepting the North American emphasis, various sources point to a male majority in comics readership, around 90% in Emad (2006) for example. Various sources also situate the average age of comic book readers at between 18-39. As such, the sample approximates what little is known about comics readership demographically. Naturally the small sample size means that all results must not be taken as inherently significant but as indicators of potential significance.

ETHICS CONSENT AND CONFIDENTIALITY

This project adopted the ethical standard put forth by Miller and Brewer, agreeing that, "...the ethics of social research is about creating a mutually respectful, win-win relationship in which participants are pleased to respond candidly, valid results obtained, and the community considers the conclusions constructive" (2003:95). In compliance with BSA guidelines, and with the approval of Stirling University's School of Applied Social Science ethics committee, informed consent was sought from all participants. And all were informed that they were free to end the interview at any point. The purpose and future dissemination of the project will be fully explained and each respondent asked if he/she would like to receive an electronic copy of the thesis upon completion. In addition, the nature of the project is such that respondents were invited to review the work and give comments prior to completion. To preserve anonymity, and in keeping with the subject matter of the thesis, respondents were asked to choose their own pseudonyms, or 'secret identities'.

It was also possible that, although there was no intent to cause harm, the issues raised by the interviews and discussions may prove uncomfortable, either by way of forcing respondents to

consider aspects of themselves that they may not have considered before or, most evidently in the case of the body, aspects that they have considered but may not be ready to talk about. Care was taken to avoid such situations. Nonetheless I ensured that respondents are able to contact me either by e-mail or phone should they wish to remove themselves from the project or discuss any troubling aspects.

ISSUES AND PROBLEMS

While gathering respondents proved to be a dispiritingly slow process, it was, perhaps ironically given the subject matter of this thesis, technological issues that proved the most troublesome. While those interviews that had taken place in the respondent's own home were easily transcribed, interviews that had taken place in public places such as public houses and coffee shops were occasionally untranslatable. More pressingly, I completed my target of twenty-five interviews but had them spread over two Dictaphones, with 20 interviews on one and 5 on the other. When it came to transcription however, I discovered that the five later interviews had been deleted. Thus I went about re-arranging the interviews. With three respondents unavailable I finally managed to track down three fresh interviewees. Similarly, where some elements of the recordings were unclear I approached respondents via email with specific questions or the semi-structured interview guide restructured as a questionnaire they could fill out and e-mail back to me. Though this process was awkward it was not without benefits. Having actually completed 28 interviews in all I had a fairly good idea of which themes were worth exploring further based on their recurrence throughout the interviews.

INTERVIEWS AND ANALYSIS

Respondents took part in two hour-long interviews, the first on superhero comics generally, and the second structured around posthumanism and the body. These interviews were open-ended and semi-structured (Appendix 3). For Miles and Gilbert such interviews are best for, "...finding out why rather than How many or How much" (2005: 66). Similarly, Alston and Bowles describe them as, "...ideal research instruments for exploratory and descriptive designs" (2003: 116). Semi-structured interviews allowed me to explore elements of each discourse, if they are known

to the respondents at all, as and when they arose, and to follow up lines of questioning not accounted for in the interview schedule (Ibid).

Semi-structured interviewing allowed both me and the respondent room to digress and develop their answers at length. Even so, the use of a 'prompt card' ensured that certain key questions- and corresponding answers-remain consistent throughout each interview (Robson, 2002:276) so that the interviews could still be a, "...conversation with a purpose" (Maykut and Morehouse, 1994: 79). The effects of the research process itself upon the data gathered must be addressed. As Huberman and Miles put it, "...choices of conceptual framework, of research questions, of samples, of the 'case definition' itself...all involve anticipatory data reduction" (1998:184). In short, that, "...the questions we ask will always to some degree determine the answers we find" (Maykut and Morehouse, 1994: 43). That there are multiple entryways into the rhizome other than the ones entered by this project. As such, analysis can be said to have begun at the point of design.

Following Barker's suggestion, conducting the discourse analysis of interview transcripts began quantitatively, which is by scouring the transcripts for certain recurring words, phrases or arguments. This involved an initial stage of open coding where the data was divided into as many codes as possible which help to sum up the similarities and differences between 'incidents': "...incidents are basically data bits or chunks discerned by the researcher as being discrete entities" (Miller and Brewer, 2003: 132) which could then be developed for each of the categories, and then broken down further into constituent 'chunks of meaning' (Maykurt and Morehouse, 1994:12). In the process of generating open codes, via constant comparison between them, certain more general categories, "...will emerge that have greater analytical power and the capacity to group more data" (Ibid). Finally, "...the researcher is required to continue data analysis until less and less variation is observed in the relationship between codes, categories and the core category" (ibid: 134). This culminated in a 'saturation point'.

Because the interviews were semi-structured I was able to begin this process by collating the answers for each question, for instance, "have you ever compared your own body to the superhero's body?" From here I was able to search for repeating themes and concepts, e.g. 'health', 'body', 'mind', and so on. These categories could then be integrated from answers

derived from all questions in the interviews. These codes were then compared and contrasted against each other and broken down further. From here I drew connections between the interview analysis and the discourses identified in the cultural history. The aim of this was not to identify some ultimate discourse that ran through both sets of data, nor to impose the discourse(s) found in one upon the other but to find points of connection and divergence between them. So, for example, in talking of how the superhero body was represented several respondents clearly pointed to the potential fascism of the superhero body, concerns that related to what was dubbed the 'Perfect Body' of the superhero in the cultural history.

Borrowing from Barker's (1989) methodology in his study of the readers of the British comic Action, respondents were asked to rate themselves as 'casual', 'regular' or 'committed' readers of comic books. This had, it seemed, natural advantages for considering the connections that readers might make between superhero comics and the concept of the posthuman. Table 1 below lists the participants according to category and ascending order of age. In the name of confidentiality respondents were asked if they would like to choose their own pseudonym, or 'secret identity'. Those who declined were given names based upon their interviews.

Table 1: Respondents

OCCASIONAL READER	REGULAR READER	COMMITTED READER
The Joker, Male, 23	Midi, Male, 30	Red Hulk, Male, 20
Ozymandias, Male, 26	Dutch, Male, 32	Pamela Montoya, Female, 23
Eye-Borg, Male, 29	The Invalid, Male, 37	Emerald warrior, Male, 24
Shiva, Female, 32		Green Lantern, Male, 25
Nemesis, Male, 38		Batwoman, Female, 26
Joe 90, Male, 45		Rogue, Female, 27
		Slothor, Female, 27
		Spawn, Male, 28
		Danger Man, Male, 28
		Logogram, Male, 30
		Venkman, Male, 31
		The Flash, Male, 32

		Ergon Cube, Male, 32
		Vesuvian Man, Male, 36
		Durinsbeuk, Male, 42
		Arkham, Male, 43

Though a useful conceptual tool it should still be noted that these categories tended to be somewhat fluid. Several 'committed' readers offered variants on the position taken by the reader Arkham, for whom the term 'committed' did not begin to cover it, offering instead the term 'voracious' to describe his comics reading habits. Although as a comic shop owner Arkham was in a unique position to read 60-70 titles per week. Other readers such as Venkman, Ergon Cube, and Vesuvian Man all viewed themselves as committed comic book readers despite reading only between 5 and 10 issues per month. However, as long-term readers they still thought of themselves as 'committed' and were either "always be reading, re-reading old stuff as well" (Ergon Cube) or still "keep up with the scene" (Vesuvian Man). By contrast, respondents who described themselves as 'occasional' readers either read only one or two graphic novels (G.N.) a year, or were occasional because their tastes tended more towards independents rather than mainstream superhero comics particularly. Even here however there was some slippage, with both Nemesis and Joe 90 acknowledging that they would have placed themselves in the latter two categories a few years earlier.

Table 2: Reading Patterns N.B G.N.=Graphic Novel

OCCASIONAL READER	REGULAR READER	COMMITTED READER
M, 23: 1-2 G.N. a year	M, 30: 2 G.N. per month	M, 20, 20+ issues per month
M, 26: 2 G.N. a year	M, 32: 8 issues per month	FM, 23, 10+ issues per month
M, 29: 1-2 G.N. a year	M, 37: 2 issues per month	M, 24, 40+ issues per month
FM, 32: 2 G.N. a year		M, 25, 20+ issues per month
M, 38: 1-2 G.N. a year		FM, 26 10+ issues per month

		month
M, 45: 2-3 G.N. a year		FM, 27, 8+ G.N. per month
		FM, 27, 6 G.N. per month
		M, 28, 1.G.N per month
		M, 28, 20-30 issues per month
		M, 30, 2-3 G.N. per month
		M, 31, 5-10 issues per month
		M, 32, 30-50 issues per month
		M, 34, 5+ issues per month
		M, 36, 10+ issues per month
		M, 42, 50 issues per month
		M, 43, 200+ issues per month

CONCLUSION

This chapter reiterated the critical-theoretical perspective taken by this thesis and how this affected its investigation of the representation of posthuman discourse in comic book narratives, and how readers make sense of these representations and their own embodiment. As such, this research involved two components—a cultural historic discourse analysis of the superhuman body, and a qualitative inquiry into reader’s responses. This chapter argues that such a project entails an inter-disciplinary and multi-method approach.

Although many of the tools used to perform the research (interviews, coding, and discourse analysis) are familiar the research makes a novel contribution to knowledge in two ways. Firstly, and most obvious, is the subject matter and the interview responses. This chapter has demonstrated a second contribution by connecting these tools to the conceptual tool of the rhizome. A rhizo-analysis of the posthuman body is a marriage of form and content. An

experiment in becoming informed by an epistemology that, "...does not fetishize completion, closed circuits, or discrete processes" (Tuck, 2010:641). As O' Sullivan puts it, thinking about the study of culture as rhizome implies, "...not a different kind of reading but a transformation". This involves a move away from the 'interpretation of culture' and towards what O'Sullivan calls, "...a pragmatics which allows for a mapping of connections between different objects and practices, events and assemblages" (2002: 81).

This chapter has also suggested that this methodological design is in keeping with the philosophical outlook of the project. In addition, it argued that style and presentation ought also to be in keeping with this philosophy, and thus argued for Deleuze and Guattari's concept of the rhizome as a suitable model for (re) presenting the research. The key elements of such an approach involve being explicit about its status as situated knowledge, always partial and to some degree arbitrary; its seeming cohesion merely the result of entering the rhizome from one particular direction. Admitting, in other words, that the selves of the respondents *and* the researcher, not to mention the 'meanings' of the texts, are not singular and fixed, but multiple and becoming.

In this sense, the aim of the project is to both investigate and embody the critical-analytic project of posthumanism. Even so, this chapter has also pointed out that this approach does not of necessity deprive the work of empirical value, and that, in fact, great care is to be taken to ensure that the work acknowledge the empirical criteria of validity, reliability and generalizability, even as it strives towards post-positivist goals.

CHAPTER 6: THE PERFECT BODY

INTRODUCTION

This chapter and the two that follow comprise Section Two of this thesis and present the cultural history of the posthuman body in superhero comics outlined in Chapter Five. The following three chapters address the first of my research questions, namely, how has the posthuman body been (re)presented in superhero comics? In answer to this the thesis presents three types of posthuman body which I have dubbed the Perfect Body, The Military-Industrial Body and the Cosmic Body. This typology marks a new, and one would hope useful, contribution to our current understanding of the posthuman body. Because there are multiple entry-ways into the rhizome of the posthuman body it is worth highlighting that the categories of Perfect, Cosmic and Military-Industrial bodies, though original and of heuristic value, are necessarily contingent and overlapping. Rather than a limitation however this understanding can allow the researcher to engage in a, "...constructive and transformative approach discourse analysis" which moves away from simple deconstruction towards the, "transformative possibilities that are produced through a re-construction" (Sellers and Honan, 2007:153). The following chapters address this by being presented in a non-linear order.

Chapter Six investigates the Perfect Body of the Golden Age of the 1930/40s. Though the perfect body is presented as an identifiable discursive formation it is also highlighted that each formation is an assemblage. It is not that the Perfect Body, for instance, has a singular meaning. The question is not just what each of these bodies IS but what they can DO. As such, Chapter Seven presents the Military-Industrial body of many contemporary comic books, which shares some inevitable aesthetic similarities of form with the Perfect Body but functions very differently. Chapter Eight then goes back some years to investigate the Cosmic Body, which was at its height during the Silver Age of the 1960s and early seventies.

The purpose of presenting the chapters this way is to present a narrative of the posthuman body that moves from the dystopian to the utopian. To present these bodies linearly would perhaps suggest a teleological progression from one formation to another, when in fact it is possible to find each of these bodies during any given period. The Cosmic Body exists as a virtual

potential within the Perfect Body for instance. What the cultural histories presented here aim to highlight is how these assemblages develop more fully according to wider trends in the discourse of posthumanity, and emphasise that there are as-yet unidentified formations waiting to be actualised. As to why this should matter, what these chapters demonstrate is that these discourses are embodied. Beginning with the Perfect Body and highlighting the history of eugenics and genocide informed by (and informing) that discursive regime highlights the potentially fatal effects of the posthumanist discourse. Similar dangers are addressed by the Military-Industrial Body. The discussion concluded with the Cosmic Body as a way of highlighting a posthumanist discourse that, I argue, ought to inform our thinking about such matters and is too often lost, sandwiched as it is usually is, between the former two.

THE THEORY OF POSTHUMAN EVOLUTION

As seen in Chapter Two the coming of the posthuman was never simply a matter of (Transhuman) technological enhancement. Rather, Post/Humanism referred to a general mode in which the human had become decentred. As such, Mazlish (1995) proposes that overcoming the binary between human and machines represents what he terms the 'fourth discontinuity' in humanity's view of itself following those discontinuities ushered in by Copernicus, Darwin and Freud. Copernicus dethroned humanity as the centre of the physical universe, while Freud dethroned the self, the rational, autonomous "I" from the centre of our psychological universe. Mazlish's typology provides a useful heuristic here, as he places Darwin's theory of evolution between Copernicus and Freud on the road to posthumanity (cf Badmington, 2000). The revelation that just as humanity is not set apart from the universe, nor in mind, nor can it be seen as separate from other life forms in the process of evolution.

Modern understanding of genetics serves to further deepen this discontinuity. Graham (2002:24) highlights a 1998 headline from the Observer reporting the discovery that chimpanzees and human beings are estimated to share 99 per cent of their genetic material. Next to large photo of a suitably anthropomorphic chimp reads the headline, "It's official. He is almost human". Graham points out that this 'scientific fact', "...enables commentators to locate in the slim margin of 1 per cent the very essence of human identity and distinctiveness: their hairy pelts; *our* moon rockets" (ibid). Despite this anxiety the rise of evolutionary theory

profoundly affected understandings of the human body, and what it could do. As Weising (2008:13) notes:

Whereas the people of antiquity viewed themselves as a well-ordered microcosm, and medieval people as the pinnacle of god's creation, modern people saw themselves in many different ways, more like a machine, in a technical sense, and finally as a flawed result of chance evolutionary processes...as such, the theoretically conceived possibilities were broadened by means of creative intervention in the structure of the machine.

In this respect, evolutionary theory, in troubling the notion of the human being as unique, was a necessary step on the road to posthumanism.

EVOLUTIONARY THEORY AND EARLY SCIENCE FICTION

Early depictions of the Superhuman expressed an anxiety about the implications of evolutionary theory. The monstrous forms of *Dr Jekyll and Mr Hyde* (1885) and *Dracula* (1897) for example, "...are articulated very precisely as regressions" (Luckhurst, 2005:23). The evolutionary visions of future humanity in H. G. Wells' *The Time Machine* or the evolutionary divergences of the Martians in *War of the Worlds* play upon the same fears. However, these concerns did not simply rest upon a fear of devolution. Evolution also implied obsolescence. As such, the early Superhuman was largely depicted as something to be feared.

Prior to Superman's debut in 1938, and beginning with the creation of *Frankenstein* (1818), the science-fiction Superhuman was subject to a common trend: "...whether saviour or destroyer the superman cannot be permitted to exist" (Andrae, 1980:125). As Coogan suggests, the idea of the posthuman as 'Homo Superior', at this stage embodied concerns about evolution. Namely that, "...just as we evolved from apes, and have conquered the animal kingdom, the superhumans who evolve from us will conquer the human world" (2006:130). In some respects, it would take the popularisation (and dilution) of Nietzsche's proto-Post/Humanist philosophy for this to change.

Before the comic book there were the 'pulp'. Named for the cheap wood pulp paper used to make the magazines, the pulps were easily affordable anthologies in a wide variety of genres, most popularly science fiction, detective and horror. Characters such as Doc Savage 'The Man of Bronze' prefigured Superman (The Man of Steel) by some five years. Doc Savage is a perfect human specimen, the result of eugenic like science to raise a child to achieve peak human potential. Doc Savage is an example of what Coogan (2006) calls "the pulp *Übermensch*". Characterised by a shallow use of Nietzsche's concept of the Superman: "...the emptying of the philosophical basis of a form and the use of an idea merely as the motive force behind a pulp plot" (2006:135). In this sense they embody the same 'illegitimate misunderstanding' of Nietzsche that the Nazis propagated (and discussed in more detail below). But it remains to highlight what Nietzsche's vision of the *Übermensch* actually stood for, or rather, to supply a 'legitimate misunderstanding'.

Asking, "What is an ape to a man? A laughing stock...so will man be to the superman", Nietzsche's *Übermensch* (Overman in its correct translation) was the ideal philosopher-artist who realizes that:

The material world is a play of forces in contention, not something that conceals spirit or meaning. It cannot be understood by using rational categories like 'subject' or 'object, or 'will' or 'truth', because all categories necessarily 'lie'... All our thinking is fiction making, making metaphors that substitute stability for the inherent instability of existence...that ultimately resists being translated into ideas or ideals like justice or truth or sin and redemption (Rivkin and Ryan, 1998:335).

The truly Nietzschean superman is content to avoid categorization, refuse to assign meaning to things and, instead, "...throw himself into the play of the world and dance with it" (ibid). As shown in Chapter Two, poststructuralist thinkers inspired by Nietzsche's refutation of humanism would later give way to critical Post/Humanism. Prior to this however Nietzsche's philosophy was prone to misappropriation. This is evident in the figure of the pulp *Übermensch*, for instance in Tarzan, who, despite being orphaned and raised by apes, is possessed of an innate, hereditary aristocratic nobility, intelligence and bearing. In fact, stories about jungle heroes such as Tarzan were a thriving subgenre themselves, in which "...derogatory racial stereotypes of the

world's people were positioned against mythical images of America's physical and, moral and intellectual superiority" (Pewewardy, 2002: 4). This juxtaposition of the Superhuman body (always white, almost always male) juxtaposed with inferior mind and body of the racial or gendered other is important, and a theme that will be returned to in due course.

EUGENICS

At the turn of the nineteenth century evolutionary theory had already found some expression in the discursive realm of the science-fiction Superhuman and the nascent realm of Post/Humanist philosophy by way of Nietzsche's *Übermensch* (itself a further influence on the development of the Superhuman). It is important to highlight how evolutionary theory also played out in the discursive realm of Transhumanism. As Weising writes, "...the Darwinian theory of evolution was the prerequisite for the eugenic movement" (2008:16). Not coincidentally it was Darwin's cousin Francis Galton who introduced the term eugenics in 1883, defining it as "the science of improving stock" (*ibid*), or, as Hack (2009:79) simplifies, "...the quasi-scientific application of Darwinism to the conscious breeding of stronger, smarter and more ethical human beings". Theories of eugenics could generally be categorised in two ways. Positive eugenics involved encouraging the 'best' and fittest' to breed with one another, thus producing strong offspring. Negative eugenics was the forced sterilisation of the 'unfit'. Eugenics is clearly related to the realm of 'bio-politics', concerned with 'regulating bodies' as well as the production of 'productive' and 'disciplined' bodies (Goto, 2004:5). As Shilling elaborates,

The body has traditionally been an object of concern for national governments at times of economic and military crises, and at times of rapid social change. For example, fears were expressed in the United States and Britain during the nineteenth century about overindulgence and fatness among the rich, and malnutrition among the poor. Both these issues were related to concerns about racial degeneration and the degenerating stock of society (Shilling, 1993: 29-30).

By the beginning of the twentieth century, watered down notions of evolutionary ideas were being expressed in pessimistic terms in theories of social decline and degeneration (Stone, 2002). By 1912 eight American states had passed sterilization laws, going up to 30 states by

1914 (Whittington and Walsh, 2002:706). Weising reminds us that in these early decades, “...liberal and left-leaning political parties also argued from a eugenic point-of-view, not only political parties leaning to the right” (Weising, 2008: 16). In fact, eugenics was incorporated into what was seen as a utopian vision (ibid), and eugenics research and conferences displayed an international, and interconnected, dimension shared across Europe and Japan (Robertson, 2001).

PHYSICAL CULTURE

The concern with healthy, productive and disciplined bodies can also be discerned in the contemporaneous ‘physical culture movement’, which manifested in ‘fittest family contests’ and coalesced around the magazine *Physical Culture*. Launched in 1899 *Physical Culture* was central to the early twentieth century bodybuilding culture and promoted diets, weight lifting and rational living and specialised in displays of the human body (Jones, 2004). “Weakness is a crime”, it warned its readers, “don’t be a criminal” (Kasson, 2001). It also became frequent publisher of articles on the need for eugenic reform (Hack, 2009: 82).



Fig 1: Physical Culture Magazine: complete with a dash of Nietzsche—"do you want more WILL POWER"?

It was also the magazine in which Charles Atlas first became known. In 1922 the magazine publicised the pseudonymous Atlas as 'the World's Most perfectly Developed Man' (Jones, 2004). Atlas would later start his own mail-order fitness business and the adverts took the form of comic strip in which a ninety-seven pound weakling develops the body of a "new man' (or perhaps THE 'new man'). These adverts became a fixture of comic books for many years. As Landon puts it, "...Charles Atlas's famous figure has become entwined with the cultural memory and experience of reading comics in general" (2008:1). Moreover, the transformation of a skinny weakling into muscular Charles Atlas did not mirror the transformation of the bumbling, ineffectual Clark Kent into the capable, heroic Superman. Atlas presented a vision of transformation, of metamorphosis (Kasson, 2001). In fact, Superman's co-creator, artist Joe Schuster, a skinny kid who himself took up bodybuilding, was a frequent contributor of illustrations to the magazine.

GOLDEN AGE SUPERHEROES: THE PERFECT BODY

One can hardly extract the Golden Age superhero from the contemporaneous popularity of the 'eugenicist concept of the New Man'—"the harbinger of Future Western industrial society"—which was common during the time of their inception. Not for nothing, "...did the new superheroes Superman, Wonder Woman, The Flash, Sandman, and Batman all visit the [1939 World of Tomorrow] fair within the fictional spaces of the New York World's Fairs Comics of 1939-1940, but a 'live' Superman also made public appearances as part of 1940s Superman Day" (Ndalianis, 2009:7). Indeed by 1939 Superman was selling an average 1, 300, 000 copies, becoming a nationally syndicated radio show in 1939 and a series of Fleischer brothers' cartoons between 1941 and 1943.

But the popularity of the Golden Age superhero needs also to be understood in its post-Great Depression context. Several authors have pointed to the influence of New Deal politics on the creation Superman (Jones, 2004, Wright, 2001). Comics' writer Grant Morrison has even called the original Superman a 'socialist superhero' (Morrison, 2011). In his earliest adventures he was something of a social reformer, a 'champion of the oppressed' who took on corrupt senators, wife-beaters and slum landlords (Wright, 2001:11). Nor was Superman alone in his liberal crusade. In one adventure the Green Lantern helps to organize a low-cost law clinic funded by

neighbourhood citizens to take on a corrupt mortgage and loan company. Dr Mid-Nite took on a mining company to ensure access for government safety inspectors, and Hourman, "...ended an abusive child-labour racket and lobbied for closer government supervision of private reform schools" (cited in *ibid*: 23).

With the advent of World War Two however, the emphasis shifted from the protection of the 'common man': "the 'common man' of the Depression era was now America itself, a repository of virtue and morality charged with extending justice and freedom to the oppressed in Europe and Asia" (*ibid*: 35). While the superhero began as a New Deal reformer and 'champion of the oppressed' the economic boom precipitated by the advent of war in Europe shifted incorporated the superhero into the establishment. Attention was turned from corrupt politicians and capitalists towards, "...the defence of private property and the extermination of criminals rather than a struggle against social injustice" (Andrae, 1980:100). The propaganda needs of World War Two served to further strengthen this connection to the establishment. As Savage writes:

Comic books became an integral part of Allied propaganda machines, emphasizing the need for maximum war effort by portraying the enemy as the inhuman offspring of a vast and pernicious evil...War stimulated the comic book industry, not only by providing much of the editorial matter, but also by expanding the audience for comic books (Savage, 1998:10-11)

Comic books were shipped to military personnel to boost morale and patriotic fervour. At one point during the war 30 per cent of all printed matter sent to military bases was comic books and comic book sales reached 15 million comic books per month. In 1943, retail sales hit nearly \$30 million (Wright: 2003:31). On the home front publishers repaid the favour by having heroes like Superman and Batman urge readers to buy war bonds or donate to the America Red Cross. Captain America showed readers how to collect scrap metal and paper (*ibid*: 34).

The war also saw the introduction of explicitly patriotic superheroes such The Shield and Uncle Sam. Jack Kirby and Joe Simon's Captain America actually debuted in 1939 and rivalled Superman in terms of popularity and readership. A consideration of Captain America's evolution

would help to highlight how all the concerns addressed thus far-evolutionary theory, eugenics, the New Man, fascism and the posthuman Superhuman-form an assemblage with one another.

CAPTAIN AMERICA: PERFECT PHYSICAL SPECIMEN

Unlike Superman, who was already blessed with alien biology and simply disguised as bumbling human Clark Kent, the skinny Steve Rogers is labelled 'unfit' for service in the army. It is only the application of science, in the form of the 'super-soldier serum' that unlocks his potential, transforming him into Captain America, a posthuman avatar of the USA blessed with super-strength and athletic agility. If this origin story evokes eugenics in its language-Steve Rogers is 'weak' and 'unfit', whereas he becomes a 'perfect specimen' following his metamorphosis-it also evokes the story of Charles Atlas. Indeed, as can be seen below, the transformation even resembles the old Charles Atlas adverts in terms of page layout as well as thematically. Hack (2006:31) points out that the origin also recalls a 1918 cover of *Physical Culture* featuring, "a weakling and a coward regenerated by army physical training". This cultural context proved to work in the comics favour with the character selling close to a million issues a month during the war (Wright, 2001:36).



Fig 2: “A New Man” and a “Perfect Specimen”: Charles Atlas’s famous advert and the origin of Captain America

Meanwhile, the stories concerned themselves with depicting the war in simple black and white terms often presenting enemy nations-the Japanese in particular- as, “...subhuman, inhuman or even superhuman, but never simply human” (ibid: 45). In other comic books the tradition passed down from Tarzan of derogatory depictions of African natives as clowns or savages juxtaposed with noble, Aryan heroes continued apace (Wright, 2001). In this way superhero comics displayed the same concerns with evolution as the eugenicists and Nietzsche in their different ways. Science fiction generally, as Kirby (2007) has argued, are haunted by the spectre of eugenics and the implications of evolutionary theory, appearing as either the themes of ‘flawed humanity’ or ‘evolutionary potential’. The same themes appear, perhaps even more frequently, in superhero comics. For many however it was precisely this conflation of eugenicist ideals, disciplined bodies, militarism and nationhood that marked the superhero as a potentially fascistic figure.

Contemporary critics such as George Orwell dismissed superhero comics as a form of ‘bully worship’ similar to that which put Hitler and Mussolini in power (Jones, 2004), while newspaper

columnists argued that superheroes gave, "...all the arguments a child ever needs for an omnipotent and infallible 'strong man' beyond all law, the nihilistic man of totalitarian ideology" (quoted in Wright, 2001:28). Others made the link to Nietzsche and fascism, bemoaning superheroes as symptomatic of a "desire for a primitive religion much like the European fascist's vulgarisation of Nietzsche's Superman (ibid.). Little under a decade after the war anti-comics campaigner Dr Frederic Wertham would sum up the issue by wondering, "How did Nietzsche get into the nursery"?

While there are obvious historic parallels between the Golden Age superhero and National Socialist neo-Nietzschean *Übermensch* there remain several reasons to be suspicious of the idea that the superhero, even in its Golden Age, was ideologically fascist. The socialist bent of the very earliest superhero comics is one reason but not least of these was the fact that the early comic-book industry was a predominantly Jewish one, whose creators were acutely aware of the implications of fascism. Listing his inspirations in the creation of Superman in 1975, writer Jerry Siegel suggested, "...hearing and reading of the oppression and slaughter of helpless, oppressed Jews in Nazi Germany" (qtd. In Fingerioth, 2004:41). Meanwhile, the debut of Captain America featured him punching Hitler in the face nine months before the country that gave him his name entered the war. Nor did the Nazis appreciate the superhero. The weekly newspaper of the SS, *Das Schwarze Korps*, published an article in 1940 mocks "the intellectually and physically circumcised...inventive Israelite" Jerry Siegel for his creation Superman which they describe as sowing seeds of "hate, suspicion, evilness and criminality" in young hearts and minds because he depicts Superman taking on Nazis instead of sharing their values. Clearly the Golden Age superhero was not quite fascist enough for actual fascists. More than these historically contextual clues though, the subsequent development of the superhero problematizes the notion of the superhero as fascist. Again Captain America provides a helpful synecdoche of this development.

Captain America's career spans from the Second World War to the present day in both publication terms and in the continuity of the Marvel Universe. When Captain America was found cryogenically suspended in the arctic in *Avengers* # 4 in 1964 it served several purposes. Firstly, it allowed Marvel comics to fully consolidate its Golden Age publications into modern continuity. Captain America and his Golden Age contemporaries-including Namor the

Submariner and the original Human Torch- existed within the history of the Marvel Universe as inspirations for the heroes of the 1960s. More interestingly perhaps, because Captain America had been in suspended animation for almost twenty years he was presented as a man out of time. A relic of a more simplistic age at odds with the tenor of the times he finds himself in. These themes became increasingly explicit as the decade wore on and the Cold War consensus that had dominated the earliest Silver Age Marvel comics in “theme and perspective” gave way to, “...growing anxiety and a fear of American institutions and leaders” (Costello, 2009:90). An extended internal monologue from *Captain America* #122 (Lee and Colan, 1972) gives a flavour of how the character was presented:

I’m like a dinosaur—in the Cro-Magnon age! An anachronism—who’s out lived his time!
This is the day of the anti-hero—the age of the rebel—and the dissenter! It isn’t hip –to defend the establishment! –only to tear it down! And in a world rife with injustice, greed and endless war—who’s to say the rebels are wrong? But I’ve learned to play by today’s new rules! I’ve spent a lifetime defending the flag—and the law! Perhaps—I should have battled less—and questioned more!

Moreover, as Costello (2009) by 1971, extended debates in the letters pages of *Captain America* moved Marvel’s Editor-in-chief Stan Lee to inform his readers that, in fact, Captain America no longer lent himself to the John Wayne-type character he once was, adding that he could not imagine any of Marvel’s characters, “...taking on a role of super-patriotism in the world as it is today” (quoted in Wright, 2001:244). In issues 153-156 of *Captain America and the Falcon* (September-December 1972) the pseudonymous heroes come up against seeming doppelgangers of Captain America and his WW2 sidekick Bucky Barnes. The two imposters are presented as paranoid, unstable, communist hating and racist. It is later revealed that these two are the Captain America and Bucky of the 1950s. Several authors (e.g. Costello, 2001; Skidmore, 1983) have suggested that the battle between the two Captain America’s is a symbolic one. American history, and blind patriotism is interrogated, and “...the extremism of the super patriot is contrasted unfavourably with the more tolerant ideological position of Captain America” (Costello, 2001:107). The real Captain America finds himself realizing that the nationalistic zealot he is fighting is a man:

Who began with the same dreams I did and ended an insane, bigoted super patriot. He is what he is because he admired me, wanted to copy me...in a very real way I'm responsible for the evil he's done

In short, the fascistic potential inherent in the concept of the superhero, in particular the super patriot is clearly acknowledged. For Macdonald the narrative development of Captain America is, "...consistent with the larger trends of American intellectual thought... [Moving] from an almost rural simplicity to an urban complexity" (1976:253). Throughout the seventies and eighties Captain America continued to be a vehicle for oblique political commentary.

Often it has been necessary for Captain America, the first super soldier and symbol of American values, to either abandon his star-spangled costume or come into conflict with the government. In issue 332 he explains, "...these people [the American Government] are not my country", and that if he returned to "...my wartime role as a glorified agent of America's official policies, I'd be compromising my effectiveness as a symbol that transcends mere politics" (quoted in Dubose 2007:931). In many Captain America stories of the seventies and eighties what is presented as evil and un-American is the desire to inflict one's own beliefs upon others. In the first flush of his creation Captain America was born to fight fascism, the infliction of totalitarian will upon populations. Later stories, unable to return to the simplistic morality of the Golden Age instead choose to suggest that the seeds of fascism lie dormant within all moral crusaders, and a depiction of government agencies, sometimes even presidents, who lack the necessary ethical framework, particularly to be in charge of super soldiers. This type of questioning, as will be shown in Chapter Seven, reaches a head in the 2000s, where the issue of who controls superhumans, or 'people of mass destruction', became increasingly central to superhero narratives in the form of Military-Industrial bodies.

In keeping with this emphasis on the fascistic potential of the posthuman Perfect Body contemporary re-tellings of Captain America's origin story also tend to play up the eugenics angle (Kerne, 2006). By 2003 Captain America's nemesis, and thematic opposite, the fascistic Red Skull was threatening to "breed a race of superman...Blond, Aryan superman" if Captain America were to join him. (v. 4 issue 17). The recent series *Captain America: Man out of Time* presents an updated retelling of the character's reappearance after years of cryogenic suspension following the war. Examining him scientist Hank Pym remarks, "after six decades

you're still a perfect physical specimen". Experiencing no small amount of culture shock in the 21st century Steve Rogers is driven by nostalgia to return to the forties. In an attempt to reacclimatise after his insight into the future of American society he visits a baseball game, taking an empty seat beside a clearly uncomfortable black father and his young son. The following exchange occurs:

CAP: Mind if I sit here?

FATHER: We-we can get up if you'd like...

CAP: Don't be ridiculous. You've got the perfect view. How do you think we'll do today, kid?

SON: We gotta win this one!

CAP: You play?

SON: Alla time.

CAP: You want to grow up to be a dodger?

FATHER: Mister, don't fill his head with nonsense like that. We both know that there's a white man's club. Come along Jeff, let's find some place to sit where no-one's gonna tease you.

(Waid and Molina, 2001: 4)

In this story Captain America's nostalgia for an imagined past is shown to be flawed. By extension the ideals that he stood for are revealed to be contingent rather than innate.

Perhaps the most radical revision of this origin story is the series *Truth: Red, White and Black* (Morales and Baker, 2003). This story reveals that the same super-soldier project that created Captain America had begun by testing the serum on a number of black soldiers most of whom are killed in the process. There are in fact historically factual parallels with this story in the Tuskegee syphilis experiments in which the US Public Health Service deliberately withheld treatment from around four hundred African American men with syphilis from 1932 to 1972 in order to study the disease's unchecked effects. Building on this historical precedent the creators of *Truth: Red, White and Black* reasonably assume that the US military would have first experimented on black soldiers before endangering the life of a white male with the procedure. The cover for issue 5's *The Math* depicts a black head inscribed with numbers, alluding to the

math of the military sacrificing civilians but also drawing a parallel between the character's experience and that of the Nazi holocaust where victims were tattooed with numbers.

THE POSTHUMAN AS FASCIST

It is curious that the superhero arrived at the same time as Hitler's shadow version of the same in his vision of a 'master race'. Here, too, the presence of both Darwin and Nietzsche can be felt. Deleuze himself distinguished between 'legitimate misunderstandings' and 'illegitimate misunderstanding of Nietzsche. The former encourage "'schizophrenic laughter or revolutionary joy" capable of bringing about a "transmutation" of thinking" (cited in Perry, 2003:184). The National Socialists represent the latter. So strong is this connection that. "...many German philosophers continue to see Nietzsche as a type of proto-fascist" (Sorgner, 2010). In actuality, the Third Reich did not universally embrace the philosopher's work. Sorgner also points several key ways in which Hitler and Nietzsche differed:

Hitler was interested in Germany dominating the world, while Nietzsche was in favour of a unified Europe, second, Hitler was interested in military power, while Nietzsche was interested in intellectual power and the capacity to interpret the world and create works of art; third, Hitler was an anti-Semite, while Nietzsche was an anti-anti-Semite (ibid: 15).

At any rate it should be highlighted that the Nazi vision of a Master race of fascist supermen did not emerge sui generis. As has already been stated interest in eugenics, in the early decades of the twentieth century, was in fact widespread.

The form of eugenics that was seen in Germany in the thirties and forties was known as 'negative eugenics' through which:

'Hereditarily defective' offspring were prevented through legally based forced sterilisation; afterwards the separation of the races was controlled, then handicapped and mentally ill individuals were murdered and finally the Jews faced

extermination...also, within the SS, a breeding program existed with the aim of creating higher quality of racial offspring (Weising, 2008:17).

Furthermore, National Socialism "...revolved around a cult of the 'mindless body' which was reflected in its art and derived from clearly articulated view of the desirable body" (Shilling, 1993:30). A politics and policy, in other words, geared towards the production of ideal bodies *and* the elimination of imperfect ones. Nor was Nazi Germany unique in its misreading of Nietzschean philosophy and embrace of eugenics. For instance, Stone shows that while many popularises of Nietzsche's work in Edwardian Britain emphasized the ethical imperatives of the Superman others, "...gradually came to place more and more emphasis on breeding and race" (Stone: 2002:16). Moreover, the concept of the 'lethal chamber', "...nowhere defined in the literature but frighteningly suggestive to a post-Holocaust audience, is a common term of reference for British eugenicists from 1900 to 1939" (Stone, 2002:7). Even as the science fiction Superman shifted from 'menace to messiah', the posthuman practice of eugenics, bolstered by diluted Nietzschean ideas, would soon be shifting in the opposite direction. Indeed, if we take the Holocaust to be, as some have argued, the culmination of the Enlightenment project - in the application of science, technology and 'reason', to the management of human society - then are good reasons to be somewhat concerned with the Transhumanist quest for human enhancement. Are Transhumanists, in not heeding, or even misinterpreting Nietzsche, repeating the same philosophical mistakes as the National Socialists and early eugenicists?

These concerns obviously have overlaps with those of the Post/Humanists. Technological change, even radical technological change, cannot fulfil its emancipatory potential without an accompanying change in the power/knowledge matrix from which such technology emerges. The insinuation being that without breaking decisively- or, 'working through' (Badmington, 2000)- the human that still lies within the Posthuman, the same abuses of power and inequalities are liable to be repeated with ever more speed and efficiency, not to mention the as yet unimagined consequences that might result from posthuman technologies.

It is unsurprising to find that Transhumanism has critics. Aside from the critical Post/Humanists, a wide variety of bio-conservatives oppose developments such as those in genetic engineering. Their more prosaic concerns are, not coincidentally, bolstered by reference to the Nazi's use of

eugenics policies. This is sometimes based on misunderstanding. For instance it is ironic to note that while some critics find Transhumanism's lack of a Nietzschean critique of humanism a potential road to fascist breeding ideologies, Habermas (2001) rejects all procedures of genetic enhancement because he *does* associate Nietzsche with Transhumanism but believes that it is precisely this association that would result in fascist breeding ideologies (Sorgner, 2010:16).

It is not hard to see how the crude application of rational methods to human populations of the eugenicists and to a lesser extent the physical culture movement, have certain affinities with the aims of the Transhumanists. Both are concerned with the deliberate manipulation of human bodies to produce beings of enhanced cognitive and physical abilities. Certainly the process of somatic gene therapy, which makes it theoretically possible to 'change the genetic set up of a person' (ibid), has both utopian and dystopian potentials. Ideologies aside, eugenics, it could be argued, marked the first clear example of what can happen when attempts are made by the state to utilise science and technology to tinker with evolution and improve humanity.

SUPERHERO AS FASCIST

As was seen in Chapter Three and touched on above, many critics and commentators have noted the confluence of eugenic ideals and corporeal emphasis in superhero comics and concluded that the genre is inherently fascist in its ideology. For Kahan and Stewart, "...the very idea of the superhero presupposes racial purity and ethnic inequality" (2006:7). Beaty, too, makes an explicit link between superheroes and 'fascist wish fulfilment' (2004:4), Art Spiegelman, whose graphic novel *Maus* was the first to win the Pulitzer prize for literature and which relates an allegorical biography of his parent's experience in Auschwitz, has argued that the work of Jack Kirby, co-creator of Captain America, the Hulk, the Fantastic Four, arguably the single most influential artists in the history of superhero comics, is fundamentally fascist in its, "...celebration of the physicality of the human body at the expense of the intellect" (in Knowles, 2007:192). Certainly in the pictures below contrasting frames from Leni Riefenstahl's *Olympia* (1938), a sanctioned favourite of Nazi propaganda, and a page from Kirby's *Captain America*, the 'celebration of the physicality of the human body' is clear enough:



Fig 3: The celebration of physicality: Jack Kirby's Captain America/Leni Riefenstahl's Olympia

This same celebration of physicality can also be found in Superman. As Jones points out, "Physical Culture was central to bodybuilding culture and so as much a part of [Superman co-creator Joe Schuster's] consciousness as *Amazing stories* and *Tarzan*" (Jones, 2004:70). The pages of the earliest Superman comics even featured short exercises for their young readers on "acquiring super-strength". While readers were encouraged to become more like the Man of Steel, Hitler was also drawing on metaphors of metamorphosis of man into metal, commanding German men to become "hard as Krupp steel" (Weitzel, 2005:231).

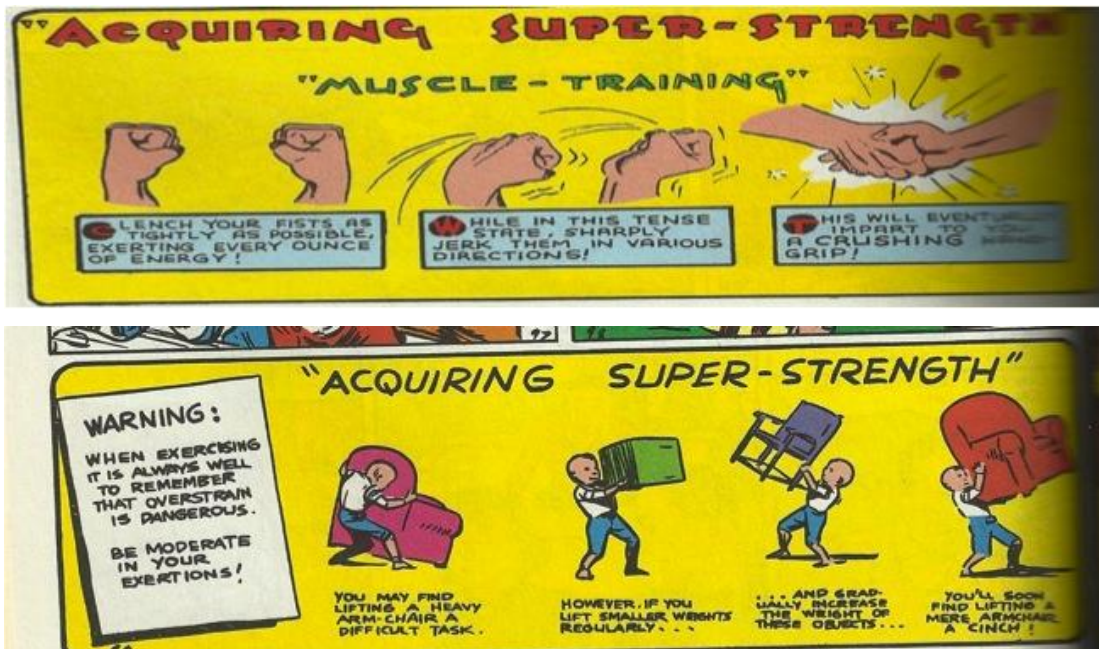


Fig 4: “Acquiring Super-strength”

Such a confluence of ideas certainly exists and this chapter has presented the first comic book expression of posthumanity as a form named, with some irony, as the Perfect Body. This discourse was shown to be the result of an assemblage formed by several socio-historic and cultural trends, drawing together patriotism, Nietzsche, eugenics, physical culture, militarism into a particular form. It is unsurprising then that some critics would categorise the superhero in ideological terms as fascistic, or, at best, right-wing. As this chapter has demonstrated there are real and significant historical linkages. Even in more general terms, Brown has suggested that, “...classical comic book depictions of masculinity are perhaps the quintessential expression of our cultural beliefs about what it means to be a man” (1999:2). While this is debatable it is still clear that the corporeal form of the Perfect Body remains the standard. Indeed, for years after he left Marvel Comics the company still largely insisted that artists follow the aesthetic template of Jack Kirby (Howe, 2012; Ro, 2005).

CONCLUSION

This thesis wanted to investigate how the posthuman body of the superhero had developed over time. This chapter has shown how the posthuman manifested during the Golden Age of comics in a form I ironically dubbed the Perfect Body. It was demonstrated that the discourse of

the Perfect Body cut across the discursive realms of the Superhuman, Transhuman and Post/Human during this period. This historically situated discourse of the Perfect Body laid the template for the depiction of superheroes and gives some credence to those critics who view the superhero as ideologically right-wing.

However, this thesis argues that the Perfect Body is merely one particular assemblage within the rhizome of the Superhuman. Rather than the essence, or fundamental meaning of the posthuman body, the fascist posthuman is the emergent result of particular links being formed, an assemblage of the posthuman AND eugenics AND Nietzsche AND Nationalism AND militarism AND so on. As will be shown in the following chapters on Military-Industrial and Cosmic Bodies, the meaning *and practice* of the posthuman body emerges from the assemblages it forms with wider social and cultural trends. The posthuman is a becoming, not a being. Grant Morrison's character Flex Mentallo embodies this idea. Ironically poaching Flex's look and origin from the old Charles Atlas ads, Morrison has Flex reveal that there was more to learn from the 'Muscle Mystery' book than simply strength. Flex discovers that his becoming posthuman requires

Techniques that I can't even begin to hint at. Muscle power, developed to such a degree it could be used to read minds, see into the future, into other dimensions even (Morrison and Case, 2006:16).

The development of the Perfect Body for Flex, as for the genre, leads beyond the body into other minds, futures and dimensions. In order to do this though, the posthuman body would have to form new assemblages, disconnected from the needs of the state war-machine and plugged into the post-war counterculture instead. Following the war superheroes soon fell out of fashion and were largely replaced by other genres. It would be almost fifteen years before the superhero comic regained prominence in what has become known as comics' Silver Age during the 1960s. That particular period will be discussed in Chapter Eight: The Cosmic Body. In the next chapter however we will jump ahead some decades from the Golden Age to the Modern Age of superheroes to consider the Military-Industrial body.

CHAPTER 7: THE MILITARY-INDUSTRIAL BODY

INTRODUCTION

The previous chapter suggested that the Golden Age of superhero comics was influenced by (and influenced in turn) visions of the posthuman in the form of what was ironically christened the Perfect Body. This current chapter of the cultural history turns its attention to the contemporary comic book superhero and, as with the previous chapter, considers how the posthuman body has developed in the related discursive realms of Trans and Post/Humanism.

Despite having shown that the discourse of the posthuman body has always involved forms of praxis such as eugenics programs and physical fitness culture, it is only fairly recently that the question of Transhuman enhancement has begun to be coached in such explicit terms and become an increasingly pressing question for policy makers. A 2006 European Parliament report by the Department for Economic and Scientific Policy entitled, *Technology Assessment on Converging Technologies* explicitly invoked Transhumanism noting that,

America-originated Transhumanism wants individuals to have full control over their mind and body, and fully use the new technologies, which, others say, make man more than human...In Europe, there has been a deliberate attempt to step away from the individual approach, and look more at the overall quality of life, social cohesion and global sustainability which should be achieved through the application of technology (Berlazznik, et al., 2006: 1.1.2.).

With this in mind the current chapter journeys through the assemblage I am calling the Military-Industrial Body. From Captain America's origin as a military super-soldier through Haraway's cyborg, the posthuman body has often, if not always, been seen as the "...offspring of militarism and patriarchal capitalism" (Haraway, 1991:151). Both militarism and capitalism can be said to inscribe themselves upon the body. Indeed, as Gray has pointed out, the " 'incontestable reality of the body' is still the fundamental ground of war even in these postmodern times...war is based on human bodies killing and dying, yet technology has rendered human bodies in war incredibly vulnerable even as it has integrated them into cyborgian (human-machine) weapon

systems” (2003:215-216). In the United States especially it appears to be the case that interest in converging technologies (or Transhumanist technologies) is largely driven by military and defence needs (Berlaznik, et al., 2006; Bainbridge, 2005). Increasingly, however, military and industrial interests are merging. In order to elaborate further it is first necessary to define what is meant by ‘military-industrial’.

Whereas nuclear, chemical and biological weapons had previously been developed mainly in military laboratories, the new technologies “...are being developed by the private sector due to the commercial opportunities that these clearly provide” (Berlaznik, et al. 2006:25). There is, of course, nothing particularly new about the relationship between the private sector and military concerns. In the aftermath of Waterloo, for instance, the bones of the dead were collected by English contractors, ground up, and sold as fertiliser for English gardens (Gray, 2003:218), but only recently has this relationship become a clearly articulated concern. The term, ‘military-industrial complex’ was popularised by the 1961 farewell address of American president Dwight Eisenhower, who warned that, “...in the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military industrial complex” (quoted in Fellman, 2009:17). Of course, in some respects the Perfect Body already embodied this notion. But where the Golden Age incarnation of Captain America, for example, exhibited an uncomplicated relationship with the state, creators from the 1960s onwards used his origins as a way to question previously unproblematic assumptions about war, patriotism, or the creation of Superhumans. This critical turn began in the early 1970s (Wright, 2003) but has had a lasting effect. After the seemingly innocent patriotic fervour of the Golden Age, and the wild flights of fantasy of the Silver Age (see next chapter), the 1980s saw a darker type of superhero emerge and a more deconstructive approach to the superhero.

As with the Perfect Body, the emergence of the Military-Industrial Body is dependent on its relations with a number of other forces. Thus it is necessary to highlight a number of (broadly) aesthetic changes in superhero comics, but also a number of industrial factors that changed the nature of the comic book industry and the consumption of comic books. These two changes – textual and industrial- are in turn connected to the wider assemblage of socio-economic trends. It will then be possible to show how the discourse of Transhumanism has transformed in

relation to these same forces. Before that however, the chapter addresses the discourse of the Superhuman.

DARK KNIGHTS FOR A DARK AGE

By the late nineteen-eighties and early nineties the superhero genre had moved through the Golden and Silver Ages into what Voger (6006) calls the 'Dark Age' of comic books. Violent anti-heroes became popular; indeed vigilantism was a general trend. Frank Miller's game-changing *The Dark Knight Returns* (1986), which remains one of the key texts of superhero comic book history, imagined a near future in which an elderly, retired Batman returns to bring order to a city fallen into chaos. It's suffocating use of multiple panels; TV pundits of all stripes providing the story with a bickering Greek chorus of contradictory ideological readings of what the Batman 'means' served to mirror the media-saturated, consumerist, conservative rhetoric of the time, an effect aided by the fact that Reagan or at least some computerized simulation of him, remains president in this dystopic future. Together with *Batman: Year One* (1987) (also penned by Miller) the Batman mythos was recast. The pop-art Batman of the 1960s television series was replaced with a violent, psychologically damaged vigilante. Moore and Bolland's (1988) *The Killing Joke* added to the mix by turning the Joker from clown prince of crime to sadistic, psychotic killer. Another established DC character, Green Arrow, was similarly re-imagined in 1988. Where once he was a latter-day Robin Hood character that relied on innocuous 'trick arrows' to capture criminals, Green Arrow tuned to using regular arrows to maim and even kill his enemies.

Similar developments were taking place within the Marvel Universe. Marvel's The Punisher had been introduced as a foil for Spider-Man in the early seventies (*The Amazing Spider-Man* #126, Feb. 1974). A veteran of the Vietnam War, Frank Castle is driven to vigilantism when his wife and children are murdered after they witnessed a gangland killing. Echoing popular 1970s films such as *Dirty Harry* and *Death Wish*, the Punisher's violent and lethal methods were often contrasted unfavourably with the more benign methods of most Marvel superheroes. By the 1980s however the murderous vigilante was in vogue and The Punisher gained his first series on-going series in 1987. The writer and editor of the Punisher's second title, *Punisher War Journal*, Mike Baron, reasoned that readers wanted to see the character wage his one man war

on crime because of, "...the average citizen's outrage at the failure of society to punish evil" (quoted in Wright, 2001:275). The rise of the anti-hero was not merely a result of the social and political climate however but also a reaction by the comic book industry to the then-surprising successes of *Dark Knight Returns* and *Watchmen*, both of which were well received by the mainstream press.

Seeking to emulate the supposed maturity and psychological realism of *Watchmen* and *Dark Knight Returns*, or come to terms with Harold Bloom's "anxiety of influence" (Klock, 2002), most succeeded in merely increasing the level of violence on display. Klock writes... "the superhero market was flooded with poorly written, violent anti-heroes...[such as] Cable, Wolverine, Venom, the Punisher, Ghost Rider, Spawn" (2002: 80) and so on. Coogan describes this as the breakdown of the "mission convention" (2006:225), established in the Golden and Silver Ages as the..."idea that a superhero selflessly serves those who need him, even those who break the social contract" (ibid, 227). A credo that Spider-Man summed up as, "... With great power comes great responsibility". As one result of this questioning of traditional (super) human values, a darker type of anti-hero became popular. Even so, the superhero as violent vigilante is not a new development. In the case of Batman, for instance, early Golden Age appearances display a darkness and cruelty unseen in the Silver Age. Nor can the comics of the Dark Age be understood as a simple reflection of the prevailing cultural climate of the time. The violent vigilante anti-hero had existed long before that and its reappearance was as much a reaction to the influence of *Watchmen/Dark Knight*, or a dialogue with them, as it was a response to wider social concerns. What is interesting that the two highest peaks of comic book sales, the Golden Age and the Dark Age of the early nineties are both so dependent on a militaristic outlook- a war against fascism in the former, and a generalised war against crime in the latter.

How did all this effect the presentation of the posthuman body? In the work of the more popular Dark Age artists this vision of the posthuman crystallises into something akin to what Susan Jeffords (1994) calls 'hard bodies'. In her analysis of 1980s action cinema, Jeffords argues for a correspondence between Reagan era political discourse and popular culture narratives. The presentation of indestructible, muscled, white male bodies like those of the Terminator's Arnold Schwarzenegger or Rambo's Sylvester Stallone, "...provided a narrative structure and a visual pleasure through which consumers actively responded to and constructed U.S. popular

culture” (Jeffords, 1994:12). The assumptions about audiences that this sort of argument relies upon were laid out in Chapter Three, but it is difficult to deny the prevalence of such images in Dark Age comic books. Moreover, they appear to be a result of both editorial mandate and reader response. Certainly stories became more formulaic. Under the corporate purview Macandrew and Forbes in the early nineties writers and artists found that low-selling titles, which in previous decades would be grounds for experimentation (as in the work of Engelhart’s Dr Strange and Jim Starlin’s Warlock in the next chapter), would simply be cancelled. All titles became off-limits to experimentation (Howe, 2012).

The immensely popular Rob Liefeld stands out for many commentators as the archetypal example of the nineties style. Liefeld is also the creator of Cable, introduced in the X-Men spin-off New Mutants as a cyborg mercenary, Cable quickly became one of the most popular of the new breed of violent anti-hero. It is difficult to argue that the Dark Age's cyborg anti-heroes had any affinities with Haraway's ideas. Rather, as with real-world advances in the creation of cyborg soldiers, they can be seen as, “...re-articulating the ever-present relationship between techno-scientific discourses and masculinist discourses”, as Masters (2010:6) puts it. Masters continues:

The cyborg soldier has blurred particular distinctions between machine and man, where *technology* embodies *masculinity*, the distinctions between the cyborg soldier and the traditional soldier have become discursively formalised along the lines of masculinity and femininity. The effect is that military technologies have been *techno-masculinised*, while human soldiers apart from technology have been feminised and reconstituted within the realm of those needing protection” (Masters, 2010:6).

Technology, and especially military technology, has come to be seen as superior to the human male body (ibid).

It is perhaps no coincidence that for Superman and Batman, the two oldest superheroes, the early nineties began with Superman being beaten to death, Batman having his back broken and both temporarily replaced with versions more in keeping with the moral tone and aesthetic trends of the time. Against the masculine hard bodies of the new anti-heroes, the non-killing, non-weaponised bodies of the older breed of superhero were therefor vulnerable.

Whether that means they were feminised remains a matter of theoretical prejudice but Blumberg dates the seeds of the Dark Age as far back as the infamous death of Spider-Man's girlfriend Gwen Stacy in 1973:

Gwen Stacy's death was undoubtedly the end of an era...With her passing, and the introduction of characters like the Punisher and Wolverine soon after, the next stage in the development of the superhero genre had arrived--not with a flash of lightning and a triumphant fanfare, but with the hollow snap of bone (Blumberg, 2003:36).

In other words, like a ritualistic sacrifice, the era of the hard, masculinised military-industrial body was inaugurated with the destruction of the soft, feminine body.

REGULATING THE POSTHUMAN BODY

After the deconstruction of the superhero in *Dark Knight* and *Watchmen*, and the resulting generic formulism that followed, many creators wanted to return the superhero to its Silver Age status. Strangely, in order to do this they would have to utilise the same weapons that had been used to deconstruct them in the first place. Thus, what had existed at a thematic level--interrogating the 'meaning' of the superhero-- instead began to manifest at a narrative level as storyline that concerned themselves with the regulation and legal status of the posthuman body.

The DC Elseworld's story *Kingdom Come* (Waid and Ross, 1996), for instance, presented a future in which the heroes of the Golden and Silver Ages--Superman, Batman, Wonder Woman etc. had retired and their successors had run amok. Clearly designed as a commentary on the Dark Age trend for violent anti-heroes, the 'leader' of this new generation is deliberately designed to resemble Rob Liefeld's popular character Cable.

In the Marvel Universe in particular superheroes continued their bristly relationship with state authority, not to mention ordinary humans. The mutant X-Men were subject to genetic prejudice, mutant registration acts and other invasions of privacy with alarming frequency. But even mostly popular heroes such as the Fantastic Four had to appear before congress in 1989 to provide expert testimony on a proposed registration act for people with superpowers because, as a pentagon official describes it, "...it would be highly advantageous to the military power of the united states, perhaps to the balance of military power in the world...if the army understood the precise nature and availability of these...extraordinary individuals in times of crisis" (Fantastic Four #335 Dec 1989). By the time of the 2006 Marvel event *Civil War* the climate had changed sufficiently that Mr Fantastic would find himself in the pro-registration camp.

Civil War (Millar and McNiven, 2006) begins with the New Warriors in an encounter with the villain Nitro in the small town of Stamford which results in an explosion that kills three of the New Warriors, the three villains accompanying Nitro, and over 600 civilians, among them 60 children. Coming after a series of destructive encounters between super powered beings in the Marvel Universe (including a destructive Las Vegas rampage by the Hulk that killed twenty-six people) public sentiment turns against superheroes. The 'Superhuman Registration Act', which had been under consideration because of these preceding events, is quickly pushed into legislation requiring any person in the United States with superhuman abilities to register with the federal government as a "human weapon of mass destruction," reveal their true identity to the authorities, and undergo proper training, earning a salary and benefits such as those earned by other American civil servants. The introduction of the act divided the Marvel heroes along ideological lines. Superheroes who had once fought side-by-side now found themselves at war with each other. At the story's denouement the heroes battle in New York, and although Captain America's side appear to be winning, upon surveying the damage and frightened citizens, Captain America surrenders, admitting that they were winning, "everything but the argument".

Writer Mark Millar has been quite explicit in intending the story to have resonances with the increased security and paranoia of post 9/11 America. Given the climate of the time Kaveney has praised *Civil War* as a "work of significant protest art" (2008:190), and its oblique

engagement with questions of freedom versus security sets it at odds with much American popular culture of the time.

Indeed, in some respects, reality caught up with comic books in the events of 9/11; a spectacular display of destruction in New York City undertaken by cyborg fusion of man and machine. In comic narratives, the posthuman body was now a weapon; superheroes had become 'people of mass destruction'. Part of the reason for this is that superheroes had moved increasingly from a reactive to a proactive role, mirroring the theoretical conception of the body in sociology from a passive object receiving of society to an agentic subject, transforming of society (Yuill, 2007: 2.3). Using the body as weapon requires a wilful agentic use of embodiment to, "exert 'upstream' influences on society leading to both to resistance and engagement with social structures" (ibid: 6.2). The relationship between state power, the military, industry and the posthuman body reached a fever pitch in the modern work of Warren Ellis.

The Authority (Ellis and Hitch, 1999) in particular proved highly influential. As Grant Morrison puts it in his introduction to the first collected volume, *The Authority* asked, "...what if the superheroes really decided to make a few changes according to 'higher moral authority'"? In early Dark Age stories like *Watchmen* and *Squadron Supreme* the decision by superheroes to make a change to societal structures ends in mass destruction. In *The Authority* the interventionist superhero is presented as a heroic, if morally ambiguous figure. When Civil War writer Mark Millar took over the series the political element was amped up and *The Authority* began to directly involve themselves in world affairs. The US government responded by incapacitating the team and replacing them with a group more amenable to their own agendas: "if there's any single truth the whole world understands it's this: the rich eat first". Elsewhere, Ellis has used superhero to explore more directly political themes. In *Black Summer* (Ellis and Ryp, 2006) a posthuman kills George W. Bush as punishment for crimes that he claims include electoral fraud, breaching the Geneva convention and prior knowledge of the 9/11 attacks which served as cover for unnecessary incursion onto the Middle East on behalf of oil conglomerates. In *Supergods* (Ellis and Gastonny, 2011) a global arms race to produce superhumans results in the destruction of the majority of the world's population.

In the mainstream continuity of the Marvel Universe Ellis re-booted Iron Man with the *Extremis* (Ellis and Granov, 2006) storyline. In this story Ellis' thematic preoccupations with technoscience, the military-industrial complex and state power remains unhindered by the fact he is working with an established superhero rather than a creation of his own. Ellis takes the problematic that has always been part of the Iron Man mythos and confronts them directly. At one point Tony Stark is interviewed by an investigative journalist clearly based on John Pilger who quizzes him about his legacy in arms manufacture. Later on Stark talks with two colleagues about the impossibility of funding for scientific research without recourse to military budgets. In the Marvel Universe, the suggestion seems to be, the game is rigged. The posthuman must either work within the military-industrial complex or the military-industrial complex will find it.

CORPORATISATION AND ORGANISATIONAL CONSTRAINT

Just as the Perfect Body formed an assemblage with the social by being used for propaganda purposes, so too does the Military Industrial Body. Wright suggests that the rise of the New Right in 1980s America embodied by President Ronald Reagan, gave rise to a conservative worldview in which the cultural upheavals of the two preceding decades were viewed as aberrations that had hurt American morale. As will be seen, this period of increased neoliberalism had a significant impact on the comics industry itself that provides the necessary context for understanding the narrative developments within the Marvel and DC Universes. The 1960s and 1970s, for Marvel in particular, were a time of experimentation and a desire for the superhero comic to be 'relevant'; but the success and licensing potential of Marvel and DC (following the success of the Batman television show DC was earning close to \$600 million from licensed products (Ro, 2005: 110)) eventually bought the business of superheroes into the corporate realm when Warner purchased National [DC] in 1969 and Cadence Industries bought Marvel in 1968. According to Steve Engelhart, the corporate purchase of Marvel also led to a more conservative editorial ethos within the company: "... They started saying, "well let's not be so different anymore, because now we're getting the merchandise"" (Spurgeon, 2006: 165).

To the corporations, as Rhodes has pointed out, intellectual property, "...Is the real business of comics" (2007: 2). Wright (2003: 259) notes that because, "... both Marvel and DC remained profitable entities for their corporate parents...thanks to revenue derived from foreign markets

and licensing deals...some corporate executives apparently questioned the need to publish comic books at all” This sort of thinking was compounded by the fact that the shrinking retail and distribution networks threatened to make comic books unprofitable.

THE NINETIES SPECULATOR BUBBLE

As shown in Chapter Three, the establishment of the Direct Market, whereby comics were sold in specialist stores, buoyed the industry. By the early nineteen-nineties the comic books experienced another boom in popularity. In 1991 comic store sales had reached \$350 million and in 1993 sales through all markets topped \$1 billion. In place of, “... The old nickel and dime ads for X-ray specs were glossy advertisements for Hollywood films video games and fashionable clothing” (Wright, 2003:280). The 90s speculator bubble was boosted further by the popularity of certain name artists. 1990’s *Spider-Man* issue one, written and drawn by Todd McFarlane sold over three million copies. The next year, Jim Lee’s *X-Men* sold over 8 million mainly to, “... speculators who bought multiple copies in order to hoard them for future sale at inflated prices in the collector’s market” (Wright, 2003:279). Other gimmicks of the Dark Age were variant covers, which ensured that collectors had to buy two or three copies of the same comic. The covers were sometimes foil, glow in the dark, die-cut cardboard or even holographic, which naturally, also pushed up the cover price.

The formation of Image Comics in 1992 was a crystallization of this confluence of events-the genre deconstruction of *Dark Knight/Watchmen* and subsequent fashion for violent anti-heroes; the increased corporatisation of the industry and fandom and subsequent speculator bubble; and the rise of the star creator. Image was formed by a handful of Marvel’s top selling artists, including Todd McFarlane (*Spider-Man*), Rob Liefeld (*X-Force*) and Jim Lee (*X-Men*). After a dispute with Marvel over pay they decided to form their own company, giving them full creative control and ownership of their characters. Marvel writer/editor Tom DeFalco recalled that the stock analysts would tell the owners that stock was falling because, “... Marvel lost the Image artists...In fact, when the Image artists left, they created such a controversy and spotlight on the industry that sales went up” (Quoted in Ro, 2005:281). Strangely, despite their independent status, the creators at Image seemed uninterested in working in the tradition of alternative

comics, preferring instead to produce variations on an already well-worn superhero theme introducing still more Hard Bodied heroes in the grim and gritty mould.

THE CORPORATE SUPERHUMAN

While the mainstream comic book industry became increasingly corporate, so too did the contemporary superhero. As discussed in the previous chapter many of the earliest superhero stories were initially suspicious of big business before the advent of World War 2. Never the less, the importance of the corporate professional as alter-ego was evident early on (Smith, 2009). Superman/Clark Kent is a journalist. The Silver Age Flash Barry Allen a police scientist. Daredevil/Matt Murdoch is a lawyer. They are all, "...professionals who fit within their corporate, institutional worlds" (ibid: 127). Smith reminds us that because the superhero is so much more outlandish than their secret identity it is easy to forget that the careers adopted by most superheroes are actually fairly prestigious.

The countercultural seventies also saw the re-emergence of the corporate villain. Tony Stark's business rival Obadiah Staine was one of several boardroom villains that featured in Iron Man. Another recurring 'villain', the Roxxon corporation, debuted in *Captain America #180* (Dec 1974) and remains part of the Marvel Universe, seemingly possessed of an endless supply of corrupt CEOs and its own vast security force employed to protect its typically suspect research and development programs into creating superhumans. Roxxon, an energy company for the most part, was also frequently at odds with Project Pegasus, which was engaged in the creation of alternative energy sources. More recently *Marvel Boy* (Morrison and Jones, 2001) introduced Hexus-The Living Corporation. This abstract villain represents the first instance of the corporation itself as posthuman. Essentially a sentient idea, Hexus spreads rapidly across the Earth, branding the entire planet with its logo. Hexus is only defeated when Marvel Boy copies its trade secrets, recruitment strategies, secret soda recipes, and the like and passes them on to its competitors. Unable to defeat Hexus physically Marvel Boy must instead fight business with business.

The archetypal corporate villain though would have to be Superman's arch-nemesis Lex Luthor. In the comics of the Golden and Silver Ages Lex Luthor was presented as a typical mad-scientist.

Following DC's reboot of its universe in 1985 Lex Luthor was reintroduced as a corrupt millionaire industrialist. Such a status only serves to reinforce Superman's 'working class' position as Kansas farm-boy. What drives Luthor however is not a thirst for money in and of itself but a thirst for power. By the 2000s Luthor had consolidated his power base to the extent that he was elected president of the United States. The questionable relationship between the state and corporate power could hardly be more explicit. In superhero comics at least the libertarian Transhuman is greeted with suspicion. In DC's 52 (Johns, et al. 2006) Lex Luthor introduces the Everyman Project (slogan: Be your own hero!), where people can pay to join a program to give them superpowers. Luthor couches this in Libertarian terms:

It means we no longer have to trust our safety to the privileged elite, the accidental few.

It means every man and woman can be a superhero...The age of the super-citizen is dawning (52 vol. 4: 102-103)

All is not how it seems however. As the hero Steel realizes, "...Lex doesn't want to create Supermen...he wants to control them" (ibid: 194). Once again the world of the Superhuman is one in which the Military-Industrial complex is not to be trusted.

Likewise there is a tradition of superheroes as super-rich as they are super powered. Batman writer Grant Morrison has suggested that Batman is a capitalist hero whose alter-ego Bruce Wayne is heir to the Wayne fortune, and head of Wayne Enterprises. Tony Stark/Iron Man is another billionaire playboy industrialist. The 2000s have seen the logical extensions of the Batman/ Iron Man notion of the corporate posthuman. In Milligan and Allred's *X-Statix* the pseudonymous team are celebrities rather than superheroes whose missions are carefully chosen by their manager for optimum public relations impact. The mutants of *X-Statix* are more concerned with their brand than altruism. Meanwhile, Joe Casey's run on *WildCats* investigated the notion of the posthuman-run corporation, centring on their attempts to make the world a better place through utilising the fantastic technologies that comic book superheroes have access to. The vision of the corporation as superhero, or force for good in the world, presented in *Wildcats* has been picked up again in Grant Morrison's *Batman Incorporated*. After Bruce Wayne has publicly outed himself as the man who funds Batman's activities (though not

admitting to being Batman himself) he sets about spreading the Batman brand across the globe, franchising out the title to a series of international superheroes.

If further indication were needed of the corporate concerns of contemporary superhero comics then the peculiar affinities between Marvel's alternate 2099 and Ultimate universes is illustrative. In 1992 Marvel put out a series of titles set in the Marvel Universe of 2099. New versions of popular characters such as Spider-Man, X-Men and the Fantastic Four existed within a futuristic dystopia in which corporations wielded more power than nation states and run both schools and law enforcement agencies. Several of the stories in the 2099 universe revolved around the attempt by corporations such as Alchemax to create super-powered beings (dubbed 'corporate raiders' in *Spider-Man 2099*). The 2099 crossover event *The Fall of the Hammer* rested on a plot by the corporations to technologically recreate the Norse pantheon, along with a new Thor, to divert attention away from the anti-corporate superheroes.

The 2099 titles only ran for a few years but in 2000 Marvel launched a new imprint known as the Ultimate Marvel Universe, beginning with *Ultimate Spider-Man* and *Ultimate X-Men*. The impetus behind the creation of the Ultimate Marvel Universe was to provide a jumping on point for new readers by re-imagining their iconic heroes in a more contemporary setting and starting from fresh without the baggage of continuity that weighed down the main Marvel Universe. In the Ultimate Universe character's origins are updated to include contemporary scientific advances; Spider-Man's powers, for instance, are no longer the result of a bite by a radioactive spider but a genetically engineered one. What is more interesting though is how much the contemporary setting of the Ultimate Universe relies on the tropes of the dystopian future imagined in the 2099 titles. The present world, it seems, is *already* one in which a corrupt military-industrial complex runs amok in the pursuit of creating superhuman weaponry.

The Super Soldier Program, in existence since the creation of Captain America during World War 2, motivates several of the corporate villains in the Ultimate Universe; each in search of lucrative military contracts. Thus the question of the nation's defence is used to bolster the economic system. Another series, *Ultimate Origins*, reveals that the mutant gene is not, as in the main Marvel Universe, an evolutionary development but the by-product of the military-industrial complex's obsessive search for military might in that world. The posthuman bodies of the

Ultimate Marvel Universe are nexus points where techno science, capitalism and the state converge; bodies created both by accident and design.

IRON MAN AND THE MILITARY-INDUSTRIAL SUPERHERO

Marvel Comics added Iron Man to their roster in 1963. Wealthy industrialist Tony Stark is working on military experiments in Vietnam when he is captured by communists and wounded by shrapnel near his heart. To save himself Stark constructs an electronic suit for himself that will keep his heart beating and allow him to escape his captors. Returning home, and still dependent on the suit to keep him alive, Stark modifies the design to become the hero Iron Man. Of Iron Man's adventures in the period 1963-1966, around a third featured communists as the villains, making him, in Costello's (2009:63) words, the 'most ardent' of Marvel's Cold War warriors.

Having been based by writer Stan Lee on "billionaire industrialist inventor" Howard Hughes, Tony Stark/Iron Man embodied the ideological divide between capitalism and communism more than most. His involvement in the development and selling of military weaponry further ensured that Stark was deeply enmeshed within the military-industrial machine. Iron Man is presented in these early tales as central to the U.S. arms race. As Russia's answer to Iron Man, the Crimson Dynamo noted in 1963, "Without him the American defence effort would be far weaker!" (Cited in Fellman, 2009:16). Such was the perceived strategic and propagandist advantage of Iron Man to America that in one early story Nikita Khrushchev himself arranged for his destruction. Furthermore, as the pre-eminent cyborg superhero, this perfect fusion of man and machine presents interesting challenges to Haraway's vision of the cyborg, being, contra Haraway, the *legitimate* child of patriarchy, capitalism and military techno-science.

Never the less, despite his initial centrality to the Cold War effort Iron Man's development displays closer affinities to Haraway's cyborg than might first be apparent (although the gendered name Iron Man may be a sticking point). Like Captain America, Iron Man's unique position within the political economy of the Marvel Universe allowed writers to interrogate his genealogy. By 1968 Iron Man was working less closely with the Government and turning his attention to social problems. Later stories made the social commentary even more explicit. A 1975 story, set in flashback in 1969, reveals Iron Man discovering a village that has been destroyed by weapons designed and sold by Stark Industries. Iron Man builds a mass grave for

the villagers and carves the epitaph WHY? Upon his return his company becomes Stark International, moving away from munitions manufacture to focus on space exploration and the environment (Costello, 2009: 117).

Again this was a hotly debated topic within the letters pages. Wright reveals that one reader, "...condemned the superhero as a "profiteering, capitalist, war-mongering pig" (Wright, 2001:241). This thesis suggests that these complaints from readers mark a shift in the discursive formation of the posthuman body, or a rupture in the rhizome of the Superhuman body. As its forces and relations change the assemblage gives way to new becomings. To put it another way, these comments demonstrate how the Perfect Body was deterritorialised by the changing concerns of its readership. The Perfect Body of Iron Man, Cold War warrior and weapons manufacturer was untenable, "a capitalist, war-mongering pig". Like Captain America's body, the Perfect Body of Iron Man became a Military-Industrial Body. Thus, these characters could be used to question rather than celebrate the political-economic status-quo. Like Haraway's cyborg these posthumans have been unfaithful to their origins. In fact, this was a common trend as comic books entered the 1970s. Superhero comics from both companies sought to become more relevant, addressing the issues of the day, questioning authority (however mildly) and slowly, if clumsily, beginning to rectify the lack of racial and gender diversity in their universes.

However, the Military-Industrial Body itself remains prone to reterritorialisation. As was seen, a confluence of forces during the early nineties witnessed a *reduction ad absurdum* of the Perfect Body in the form of the Hard Bodies of the Dark Age. That this reterritorialisation should occur when it did is unsurprising. A related turn was taking place in other media focusing on posthuman bodies in figures such as Schwarzenegger's The Terminator. In the discursive realm of Post/Humanism, the work of Haraway (1985; 1991) and her Cyborg Manifesto was also engaging with the Military-Industrial Body.

For Heggs (1999), "...the cyborg and the superhero resist the consequences of boundary transgression, and that the political affinities, so often desired of cyborgs, are open to naturalization, for example, around the thematic of masculinity" (1999:185). It would be disingenuous to try and deny that, in the Dark Age in particular, an image of the posthuman as militarised 'hard body' were dominant. However, it was also shown that such representations

were a product of a complex interaction of forces, the aesthetic manifestation of social, political and economic climate, industry pressures and practices, an increased emphasis on creator over characters, and a struggle to come to terms with the impact of *Watchmen* and *Dark Knight Returns* among other factors. The comics of other eras still offer avenues for explorations that prove the comic book posthuman is not quite as heterogeneous as Heggs (1999) suggests. Indeed, some are quite radical, as will be shown in the next chapter on the Cosmic Body.

For now, it still remains for this chapter to turn its attention to the Transhuman. Unlike the Superhuman and Post/Human, the discourse of Transhumanism generally remains faithful to its Military-Industrial origins.

TRANSHUMANIST LIBERTARIANISM

So far it has been shown how the Superhuman and the Post/Human used the cyborgian Military-Industrial Body to highlight political-economic concerns. Transhumanist texts do not often address such concerns. Often their utopian visions of the future seem to be achieved solely by the technology itself. In short, scientific progress is presented as if it existed in a sort of vacuum, untouched by social and political concerns. In actuality, Transhumanism's Utopian dreaming of personal freedom and belief in self-improvement are rooted, as Sobchack has noted, "...in privilege and the status quo: male privilege, white privilege, economic privilege, educational privilege, first world privilege" (1994:25). As a recent European parliament report on converging technologies describes it, the emergence of Transhumanism as a political-philosophical movement, "...has its roots in Californian libertarianism...faith in small entrepreneurs, technology and the minimum of government intervention are its characteristics" (Berlazznik et al., 2006:2). In short, "...its dreams are grounded in the freedom to buy and- especially-the freedom to sell" (Sobchack, 1994:25.)

However, Berlazznik et al. (2006) note that within the World Transhumanist Association a more European style liberal democratic Transhumanism has also developed. A comparison is made between a report put together by the American government's National Science Foundation titled *Converging Technologies for improving Human Performance* (Roco and Bainbridge, 2002) and a report into the same subject titled *Converging Technologies-Shaping the Future of*

European Societies (Nordmann, 2004) put together by the HLEG (High Level Expert Group on European Low Dose Risk Research).

In comparing the American and European reports the authors note that while National Science Foundation's report, "...was predominantly compiled by technical scientists, the European expert group...mainly consisted of social scientists, ethicists and philosophers" (ibid:29). As such, its approach significantly deviates at certain points from the former. For example, the European report criticised the technologically deterministic approach of the NSF report, and instead emphasised that, "...technologies are formed in interaction with the social context" (ibid). The HLEG report also, "...criticises the individualistic philosophy behind the American report that in particular wants to deploy convergence for increasing human efficiency and production" (ibid:30). In short:

The European report continually emphasises that technology should be in the service of people. Whereas the American report talks about 'engineering *of* the mind' and 'enhancing the human body' the European report talks about 'engineering for the mind' and 'engineering a healthy body' (ibid).

While such an emphasis may appear admirable, it never the less, as the ETAG report noted, 'cleverly circumnavigates the thorny issue of improving humans' (ibid). Never the less, while Transhumanism has only recently been raised as a question for social policy the remains one area where the quest for human enhancement has been embraced.

SUPERSOLDIER FACT AND FICTION

In the US, spending on military defence was over \$400 billion in 2005 (Evans, 2007) and much of this on attempts to create various types of super soldier. Gray (2002) has described in detail the emergence of the 'cyborg soldier', and as Masters points out, following Foucault, while all human bodies are enmeshed in a 'machinery of power' the military has always been the exemplar of the constitutive process, "...where through its disciplinary techniques it came to produce the subject desired" (2010:3). If the military may be seen as a sort of microcosm of the machinery of power utilised by the state to create 'docile' and obedient bodies then its current

fascination with human enhancement and augmentation surely has something to communicate about trends emerging outside of the military context. Certainly there is little difference in principal between the goals of the Defence Advanced Research Projects Agency (DARPA) to “sustain and augment human performance” (Glover, 2006) and those of Transhumanism. Of course, military visions of the posthuman body have, by their nature, strategic and violent elements. As chair of DARPA Michael Goldblatt said in 2003, “...DARPA has recently begun to explore augmenting human performance to increase the lethality and effectiveness of the war fighter by providing for super physiological and cognitive capabilities (quoted in Milburn, 2005:83). Added to these developments is an increasing reliance on armed robots, some of which are remote controlled, allowing soldiers to engage in combat over large distances as well as an interest in developing unmanned land and air vehicles. The proliferation of these projects heralds the dawn of an age of posthuman warfare.

While in the Golden Age the military assemblage territorialised the superhero assemblage for propaganda purposes, contemporary military researchers also poach from the Superhuman. Sometimes this is as simple as DARPA adopting acronyms such as BaTMAN (Biochronicity and Temporal Mechanisms Arising in Nature) and RoBIN for their endeavours or the words used by Edwin Thomas of MIT’s Institute for Soldier Nanotechnologies who described his vision of the super soldier by imagining, “...the psychological impact upon a foe when encountering squads of seemingly invincible warriors protected by armour and endowed with superhuman capabilities (quoted in Milburn, 2005:81). The presence of the adjective ‘super’ in this statement should come as no surprise although the superheroic posthuman, even in its supersoldier guise, does not necessarily reflect this particular vision. The soap operatic elements of most superhero comics would certainly have to be muted if they were to adopt another of DARPA’s goals to develop a technology to ‘regulate’ emotions:

By linking directly into the sense and remotely monitoring a soldier’s performance, feelings of fear, shame or exhaustion could be removed. What was once achieved by issuing soldiers with amphetamines could now be done remotely with greater precision (Kundnani, quoted in Masters, 2010:5).

In 2002, a proposal submitted by the Massachusetts Institute of Technology (MIT) to the U.S. Army was awarded \$50 million to create the MIT Institute for Soldier Nanotechnologies (ISN) (Milburn, 2005). While the proposal outlined a variety of currently feasible and speculative military applications of nanotech, its cover image, featuring a futuristic soldier in mechanical armour, presented, in visual shorthand, the scientific possibilities outlined in more technical detail within the proposal. The image was later removed from ISN websites when two comic book creators alleged that it was simply a reworked version of the cover image of their *Radix* issue one. The creators felt that MIT had taken the futuristic super soldier from its comic book origins in order to secure military funding: “they’re selling this as science fact while we’re trying to sell it as science fiction” (quoted in *ibid*: 78). The image of the super heroic super soldier serves to create a gap between text and image, between a written account of science yet-to-occur and the image of what a futuristic soldier might look like. What happens within this gap is the laborious business of the science itself (*ibid*). The science-fictional status of nanotechnology and militaristic visions of the super soldier have come to, “...rely on cultural familiarity with comic book myths...to suggest that nanotechnology, in replicating or materializing these myths at the site of the soldier's body, can create “real” superheroes” (*ibid*: 85).

CONCLUSION

As this thesis has pointed out, posthumanism comes in many forms: in Transhumanist visions of technological enhancement, in techno-scientific practices, in philosophy and critical theory and of course in science fiction and comic books. Certainly the superhero texts that have been discussed in this chapter illustrate a consistent concern with how the posthuman and the human interact, what it means to be human when one is possessed of superhuman abilities, and the ethical problems of imposing one person's vision of (post) humanity on another (or many others). Outside of comics, however, particularly in the realm of techno-scientific practice, it becomes more difficult to disagree with Masters (2010) assertion that, in fact, “...the cyborg is fundamentally a masculinist project” with “little transgressive potential to be found in the figure of the cyborg as it leaves intact and further embeds gender as a regime of power” (2010:8-9).

As this chapter has shown, in superhero comics at least, the military mind-set and posthuman bodies are a problematic and often dangerous combination because the Military-Industrial

complex lacks the moral code that restrains superheroes in their use of power. Meanwhile, those in charge of the military-industrial complex poach the figure of the Superhuman and a reterritorialisation occurs, such as when in contemporary management discourse business leaders have been likened to superheroes such as 'Neutron' Jack Welch of General Electric (Reign and Lindahl, 2007). Or when the February 2002 cover of Germany's Der Spiegel magazine featured the Bush cabinet dressed in the iconographic clothes of various superheroes and action movie characters such as Rambo and Conan the barbarian with the headline: "The Bush warriors: America's Crusade against Evil", and the flattered President ordered thirty-three poster-sized enlargements of the cover (Hassler-Forest, 2011:5). Thankfully, the process works both ways: at least one Nano scientist has advocated a nanotech-ethics based on spider-man's dictum, "with great power comes great responsibility" (Milburn, 2005:88). Whether other researchers and policy makers will absorb the same moral lessons (if indeed they should at all) remains, as yet, purely speculative.

CHAPTER 8: THE COSMIC BODY

INTRODUCTION

Chapters Six and Seven recounted the appearance of the posthuman as the Perfect Body during the Golden Age of comic books and its later transformation into the Military-Industrial Body. The Perfect Body laid out the template for the iconography of the superhero. The next surge of popular interest in superheroes came to be known as the Silver Age of comics. This period saw the emergence of what this thesis dubs the Cosmic Body. The aspects that 'define' the Cosmic Body, like the use of magic, occult tinges, and evolutionary mysticism, were already apparent in the Golden Age. Characters like The Spectre, and Dr. Occult from Superman creator Jerry Siegel gained their powers from metaphysical rather than scientific forces. As will be discussed below, all superheroes display aspects of the Cosmic Body to some extent, in as much as the science presented in them is, "...at most only superficially plausible, often less so, and the prevailing mood is mystical rather than rational" (Reynolds, 1992:16). But the corporeal concerns of the Golden Age meant that, as a rule, and in terms of sheer popularity and sales, the Perfect Body was emphasized over the Cosmic Body. Similarly, while the Cosmic Body can certainly be found in contemporary comics, the focus has shifted to the Military-Industrial body for the most part. As with the previous chapters, the Cosmic Body emerged from a very particular socio-historic discourse of the posthuman. Once more this chapter will demonstrate how this particular figuration of the posthuman body constitutes an assemblage of overlapping discursive realms. The Cosmic Body is not simply limited to the realm of the Superhuman but can also be discerned with Post/Humanism and Transhumanism.

Many writers have highlighted how the Silver Age of Comics coincided, and chimed with, the birth and concerns of the 1960s counterculture (Wright, 2008; Davis, 1998). As such, to understand the Cosmic Body a certain amount of context is needed. Key to this understanding however is acknowledging the countercultural trends of the 1960s. It has been noted that 'the movement', for lack of a better term, of the 1960s was comprised of several, often contradictory wings, finding expression in popular music (exemplified by the artistic trajectory of The Beatles), literature (Burroughs, Ginsberg), radical or anti-psychiatry (Laing, Schatz), psychedelic philosophers (Leary, Kesey) and proponents of Eastern philosophies and religion

(Anderson, 1990:47) and added to this cultural *mélange* was a, “...more recognizably political wing”(ibid) manifesting itself in the civil rights movement, second wave feminism and growing protest against the Vietnam War. Nor, like the eugenics and physical culture movement of the Perfect Body, or the globalized reach of the Military-Industrial Body, was this counterculture confined solely to the UK and the US. The events of May 1968 in Paris testify to the Francophone variant, while Brazil produced its own psychedelic counterculture dubbed ‘Tropicalismo’, and bootlegged rock and roll albums and black market drugs fuelled an underground revolution on the Eastern side of the Berlin Wall (Sirius, 2004). These strands, though each with their own particular biases were often overlapping and international in scope. See, for instance, Black Panther leader Huey Newton harbouring a then fugitive psychedelic proselytizer Timothy Leary in Algiers (Higgs, 2006), or the 1967 London conference that brought together beat poet Allen Ginsberg and radical psychiatrist R.D. Laing and Black power activist Stokely Carmichael (Hewison, 1986). For Andersen, what each of these disparate strands shared, was a common

Idea of reality, of worldviews, of something in the realm of thought that could be changed. Even the political revolutionaries, for all their contempt of Leary and Watts, considered themselves to be at war against a “false consciousness” that propped up unjust political structures (Andersen, 1990: 47).

One result of this, to use an example most indicative of this chapter’s concerns, was that ‘acid-heads’, post-structuralists and popularisers of Eastern mysticism all agreed (albeit for wildly different reasons) on the illusory and mutable nature of both the self and society. It was but a small step then to see the ‘human’ as equally illusory and mutable, unlike the patriotic and obedient version of posthumanity represented by the Perfect Body. Attention is first focused on the Cosmic Body as expressed in the realm of the Superhuman, before going on to journey across the discursive plateaus of the Post/Human and Transhuman.



Fig 6: Astral Forms and Cosmic Bodies: Dr. Strange and Eternity

SILVER AGE CREATORS AND CREATIONS

If Marvel spoke to the aesthetic and political leanings of the counterculture it also chimed with its psychedelic wing. The key Marvel creators of the time, alongside writer Stan Lee, were artists Jack Kirby and Steve Ditko. Dr. Strange was the co-creation of Ditko and Lee, and Ditko's depictions of non-Euclidean mystical realms held great appeal for users of psychedelics in the 1960s. That Strange answered to an ascended Tibetan master known as the Ancient One and entered immaterial realms by projecting his astral form while his meditating body lay prone in his Greenwich Village apartment (or Sanctum Sanctorum) could only consolidate his appeal for a movement already primed by imported eastern mysticism and altered states of consciousness. It was not unknown for trippers to use the pages of Dr. Strange as a guide for their experience. It is testament to Dr. Strange's unique appeal that the Wiccan priestess and underground comic artist and publisher Catherine Yronwode, in a supreme act of what Fiske (1992) calls 'textual productivity', compiled and self-published a version of Strange's fictional grimoire *The Lesser Book of the Vishanti* (1977) by compiling the various incantations, spells and references to demons and other realms that Strange made in the comic books (the text is available online). At the simpler level of semiotic productivity (ibid), October 1965 saw the rock band Jefferson

airplane and others put on an evening of music entitled “A Tribute to Dr Strange” (Lachman, 2001). As well as having a quite literal Cosmic Body in his astral form (see above right), Strange also encountered super villains quite unlike any seen in comics before; literal embodiments of abstract concepts, such as Eternity (above left).



Fig 7: Cosmic terror: “We’re like ants...just ants...ants!”

While Ditko co-created Spider-man and Dr. Strange, Jack Kirby helped lay the groundwork for the entire Marvel Universe. Alongside Stan Lee the two men had a period of extraordinary productivity in the 1960s, creating the Fantastic Four, Hulk, Iron Man, Daredevil, Thor and a multitude of complex super villains for them. Kirby took the evolutionary concerns of the Perfect Body’ and put them in a cosmological context. Kirby’s Silver Age comics introduced a cosmic scope to their narratives that implied unimaginable vistas of evolutionary development that made humans seem a transient and insignificant stage by comparison. So it is that when faced with the planet devouring Galactus, the Human Torch plunges into existential anguish; “we’re like ants. Just ants-ants!!”(Lee and Kirby, 2005: 165) Even as seemingly earthbound a character as Captain America found his nemesis, the Red Skull, wielding the Cosmic Cube, a kind of philosopher’s stone whose properties would allow him to enforce his fascist ideology not just on Earth but across the entire universe. Kirby’s work also fused science and magic in interesting ways. As Bainbridge says, “...the premodern, the sacred, the mythological are replaced with

science and technology...in images like the Cosmic Cube, ego the Living planet, the scientific mythology of Asgard and the towering figure of Galactus” (2009:74). This fusion or blurring of science and magic, as will be seen, is central to understanding the figure of the cosmic posthuman and it is a theme Kirby continued developing throughout his career.



Fig 8: Separate Realities and Metamorphosis: Dr. Strange and Captain Marvel

While Kirby and Ditko were apparently working on instinct in their psychedelic imaginings, by the late sixties and early seventies a new breed of writers joined Marvel Comics, young enough to be influenced by both Kirby and Ditko and the counterculture. This trend is especially evident in the work of Jim Starlin and Steve Engelhart. Engelhart was a student of esotericism managed to sneak some alternative history into Marvel comics by taking Dr Strange through an occult history of America (Knowles, 2007). One of his most famous stories, *A Separate Reality* (pictured above) takes its name from the book by anthropologist Carlos Castaneda (1991), which claimed to describe his experiences with a Yaqui Indian shaman Don Juan Matus, and whose books remain a fixture of countercultural libraries (Lachman, 2001). Starlin’s lauded runs with the characters Adam Warlock and Captain Marvel plunged both characters into frequent battles

with their own demons and mirror selves. The major villain in these stories is the alien-god Thanos, whose threat was not one of financial gain, property damage or even physical violence, but an ontological assault on the nature of reality itself. Under Starlin's guidance Captain Marvel even underwent a quasi-shamanic death-rebirth experience, developing 'cosmic consciousness' in the process (see illustration above). Starlin, who wrote and illustrated these stories, presents them in a way that chimes with descriptions of the psychedelic experience. Wolk (2007) describes the book as 'very druggy' while Grant Morrison (2011:137) has called Starlin's vision of Captain Marvel an, "out and out Psychedelic superhero". Both Engelhart and Starlin are on record about the role that drugs played in their creative process. Said Engelhart, "... I smoked dope, and dropped acid, and ate mushrooms-and I made my deadlines" (quoted in Howe, 2012). He and Starlin, along with artists Al Milgrom and Alan Weiss, were known to wander Manhattan under the influence of LSD to come up with ideas for new stories (ibid).

Perhaps this explains why some authors have recognised a genealogy that links the superhero comic with the history of magic and religion. Kripal (2010) and Knowles (2007) have drawn attention to the "surprisingly intimate ties" superhero comics have to, "...the histories of occultism, psychical research, and related paranormal phenomena" (Kripal, 2010:6). But for some writers this is not just a structuralist argument about repeated mythic patterns, of interest for merely intellectual reasons. Often the recurrence of these mythic patterns is taken as evidence of a more fundamentally magical or at least spiritual lineage.

Wright (2007) has suggested that the supernatural feats of the shaman can be understood as super heroic feats, and that, "...the modern superhero is a contemporary manifestation of the ancient shamanic role" (2007:127). Wright argues that epic narratives of the classical world, and by extension modern mythologies, contain vestiges of shamanic themes of death, rebirth, initiation and transformation. Comic book writer and tarot card designer/interpreter Rachel Pollack also argues that the superhero comes from shamanism, stating, "...all these people with animal powers traveling to mysterious other worlds. That's straight shamanism" (in Davis, 1994).

Meanwhile, Carstens has linked the figure of the shaman with the figure of the posthuman more generally:

In our techno-confused world, no figure could be better suited to the task of gaining a new technological terra-infirma than the ancient arbiter of the sacred and master (and mistress) of communicative ecstasy, the shaman...the hybrid and science-fictional intersection between the cyborg, the new flesh of posthumanism...has its origins in the ecstatic transformations of the alchemist and the shamans (2005:3-4).

Both are involved in the creation of new articulations, new discourses; new narratives of becoming or 'permanent possibility' (ibid: 11). The Cosmic Body emphasises transformation and the unlocking of potential and power. Perhaps the writers most influenced by this tradition though are Alan Moore and Grant Morrison.

SUPERHERO AS SHAMAN, CREATOR AS MAGICIAN

Just as writers like Steve Engelhart used Dr. Strange and Shang-Chi: Master of Kung Fu as a way of exploring Western and Eastern mystical philosophies (cited in Howe, 2012) contemporary creators like Alan Moore and Grant Morrison have introduced magical themes, characters and ideas in their superhero (and creator-owned) comics. Interestingly, both writers are practicing magicians who have also actively created works designed to work as magic. Moore's and William's (2001) *Promethea* begins as a Wonder Woman-type superhero comic before making a u-turn into Moore's personal cosmology whereby the narrative effectively stops as the lead character becomes au fait with the symbolism of the tarot and kabbalah. In issue fifteen Moore uses the comic to question the ontological status of the readers reality compared to that on the page. Speaking with the archetypal form of the god Hermes the lead character Sophie Bangs is confused by his claims that, "it's all a story isn't it? It's all fiction, all language...it can change like quicksilver". Sophie replies, "But...this isn't fiction. This is our real life". Hermes laughs and tells her (and the reader), "Real life. Now there's a fiction for you!" A few panels later Hermes looks over his shoulder, out of the frame, directly to the reader and says, "I'm saying some fictions might have a real god hiding beneath the surface of the page. I'm saying some fictions might be alive". (Moore and Williams III, 2001:17).

Like Moore, Morrison also uses his work to trouble the distinction between fantasy and reality. The occult anarchist sci-fi thriller *The Invisibles* (1994-2000) is an obvious example but even his superhero work has been used this way. His *Marvel Boy* (2001) was designed to be an invocation of Horus, the conquering child of the notorious magician Alistair Crowley's new aeon, representative of a, "...youthful, ruthless and revolutionary current that would sweep through human affairs" (Morrison, 2011:315). *Animal Man* (2003), *Superman Beyond* (collected in *Final Crisis*, (Morrison, Jones et al. 2009) and *Seven Soldiers* all feature scenes of characters reaching out of the page to the reader, effectively transcending their two-dimensional space. *Superman Beyond* even came with 3-D glasses to literalise this visual metaphor. This is not a process unique to Morrison, comics have long displayed self-reflexive breakings of the fourth wall, and Morrison's trick of appearing in his own fictions was pioneered long before in 1965 by Jack Kirby and Stan Lee being turned away for the wedding of Mr. Fantastic and The Invisible Girl in *Fantastic Four Annual 3* (Lee and Kirby, 2005). But Morrison has perhaps displayed the keenest awareness of the philosophical and metaphysical implications of such games.

Morrison's oeuvre engages in an investigation of reality-the reality of the DCU and ours. As Pedler astutely observes, "...Morrison's mission... [is] to make our reality as interesting as theirs, as surreal, full of every potential and possibility" (Pedler, 2009:264). The reader is free to make what they will of the above. Whatever one's views on the efficacy of using comics to effect magical changes in reality, it is interesting to note that on a smaller scale the superhero archetype seems to have been invoked or utilized successfully by various therapists. Rubin and Livesay (2006) and Haen and Brannon (2002) have attested to the efficacy of utilising the superhero archetype in child therapy. Burte has written of using superheroes in hypnotherapy, calling them, "...an incredible resource for fostering self-examination, change and growth" (2006). The superhero archetype seems to have been invoked or utilized successfully by Jungian therapists, finding that, "...superhero archetypes are images that represented what is known as the transcendent function, a process that operate as bridge between the opposites, therefore providing unification in the psyche, restoring energy and promoting healing" (Egolf, 2007:141). These sources perhaps suggest some empirical validity to the notion of superheroes as contemporary manifestations of archetypal forms or mythic patterns. Or what Morrison describes as, "a radical enchantment of the mundane" (Morrison, 2011:48). In short, shamanic fictions.

COSMIC BODY AS ASSEMBLAGE

The vision of the Cosmic Body was formed from a loose bricolage of cultural resources. Pilfering from Eastern spiritualities, science fiction paperbacks and the Western esoteric tradition, the youth counterculture stitched together a version of the posthuman that rested on an evolutionary mutation of consciousness-and a realignment of humanity's relationship with the universe. This vision was both compounded and, for many, facilitated by the counterculture's adoption of psychedelic drugs, which had re-emerged as a source of intellectual and psychiatric interest in the forties and fifties.

It became increasingly common to adopt terms from science fiction to articulate the emergence of this new youth consciousness. In 1967 the *San Francisco Oracle* published its 'Manifesto for Mutants' for example, stating:

Mutants! Know that you exist!
They have hid you in cities
And clothed you in fools clothes.
Know that you are free.

(Quoted in Lachman, 2001:30)

Unsurprisingly, superheroes (some, like the X-Men, mutants themselves) provided another source of metaphor and inspiration. Steven's (1998) history of LSD in America notes how the psychedelic movement embraced the comic book visions of posthumanity, suggesting that for the 'baby-boomers', "...encoded within these lurid pamphlets was another version of the evolution myth that saw mankind transforming itself upward" (1998:78). Novelist Ken Kesey had found fame with the publication of *One Flew Over the Cuckoo's Nest* (1962), a book whose story and themes exemplify many of the ideas raised by this chapter - the liberatory potential of madness versus the despotism of reason - was particularly keen on interpreting superhero comics as 'Nietzschean parables' (ibid; 178), and said that, "a single Batman comic is more honest than a whole volume of Time magazine" (ibid).

For a good part of the sixties Kesey travelled America with his band of ‘merry pranksters’ in a bus (stated destination: ‘FURTHER’) driven by Neal Cassady, a key figure of the Beat movement that had preceded (or pre-seeded), the movement of the 1960s. Kesey and the pranksters would stop on their travels to stage ‘happenings’; free concerts and such like where attendees were invited to pass the ‘acid-test’ via a glass of free punch spiked with LSD (Wolfe, 1989). Stevens (1998) notes that while early proponents of psychedelics like Huxley and Leary might utilize the iconography of the Buddha to guide their ‘trips’, Kesey opted for Fawcett comic’s Captain Marvel or Marvel Comics’ Thor (as in the acid-test poster below).

Despite their different inspirations though, “...in a sense, this was the same teleological yearning for a transformed man” (Stevens, 1998:178). Kesey was not alone. In a different register the Process Church of the Final Judgment, a sci-fi infused religion that competed with Scientology during the 60s in terms of adherents and international breadth, was not afraid to incorporate Marvel heroes like Thor and the Hulk into its propaganda (Lachman, 2001:270).



Fig 9: “Can you pass the acide test?”: Merry prankster posters incoporating Thor (left) and Captain marvel (right)

The comics of the Silver Age chimed with more than just the psychedelic wing of the counterculture. DC Comics may kicked off the Silver Age of Superheroes when the pilfered a character name form the Golden Age to reimagine The Flash in 1956 but, the Silver Age of comics was, in many respects, the Marvel Age of Comics. The Silver Age innovations of Marvel

Comics had made superheroes, especially Marvel superheroes, into the stuff of countercultural fantasy. What distinguished Marvel comics was characterisation. While DC's superheroes remained to some extent stuck in the Golden Age and more clearly noble and unquestioningly heroic, Marvel characters like Spider-Man, the Fantastic Four, the Hulk and the X-Men were flawed human characters, prone to neurosis, insecurity and bickering. Their powers were a curse and a burden as much as a gift.

Marvel's comic books became popular on American college campuses and writer-editor Stan Lee began to get invited to speak on the modern mythology of superheroes. In 1965, a poll taken by Esquire magazine "...revealed that student radicals ranked Spider-man and the Hulk alongside the likes of Bob Dylan and Che Guevara as their revolutionary icons" (Wright, 2003:223). Comic book art was appropriated by practitioners of the Pop Art movement like Roy Lichtenstein and Andy Warhol (see below), while Marvel repaid the favour by briefly branding their comics as 'Marvel Pop Art productions'. Stan Lee was courted by the leading lights of the European cinema such as Alain Resnais and Fellini (Ro, 2005; Raphael and Spurgeon, 2004. It hardly seems coincidental that in 1968's *Easy Rider*, the first film by and for the counterculture (Biskind, 1998), and itself influenced by European Art cinema, should name a central character after Marvel's Captain America.



Fig 10: Pop Art Productions: (from left to right) Lichtenstein's Image Duplicator, Marvel Comics cover banner, Warhol's Superman screen-print

POST/HUMANISM AND THE COSMIC BODY

As has been seen throughout this chapter the confluence of magic and science is central to understanding the Cosmic Body. Moreover, it is this hybridity that it most shares with critical Post/Humanism. Lachman has mused that, "...while neither can be considered occult, Derrida's critique of meaning and Foucault's exploration of forbidden states share much with the irrationalism and 'giving way to strange forces' that characterized sixties occultism" (Lachman, 2001:395). There are several good reasons for taking seriously Lachman's suggestion that what the continental philosophers sometimes known as anti-humanists or the Class of 1968 (Rivkin and Ryan, 1998) had in common with their more psychedelic and mystically minded peers in the counterculture of the US and Britain was a willingness to follow novelist and countercultural figurehead William S. Burroughs injunction to "exterminate all rational thought".

Foucault's ideas also share (both direct and indirect) links with psychedelic discourse. The psychiatric uses of psychedelic drugs have already been discussed, particularly their use by members of the 'anti-psychiatry' movement, with whom Foucault's ideas are often aligned. Merquoir memorably describes this movement as, "...a whole progeny of vindications of psychosis...all cast in a strong 'counter-cultural' mould" (Merquoir, 1985:25). To be brief, Foucault contends that there was once a 'dialogue' between insanity and reason. Merquoir summarises Foucault's notion that, "...before the constitution of madness as an illness", the inmates of mental institutions had:

Actually enjoyed more freedom than the modern therapies allow them, because 'classical confinement' treatment did not aim at changing consciousness. Their body was in chains but their mind had wings. Wings later clipped by the despotism of reason (ibid: 24).

Turning back to the comic book posthuman, contemporary depictions of Batman's nemesis and shadow The Joker help to illustrate this point. Since the 1980s depictions of The Joker present him as an evolutionary mutation; not insane but in fact possessed of a 'higher disorder' of sanity. In the Batman graphic novel *Arkham Asylum* (Morrison and McKean, 2005), which draws heavily from Jung as well as occultist Alistair Crowley and the symbolism of the tarot, a

psychiatrist tells Batman she believes the Joker possesses, "...some kind of super-sanity...a brilliant new modification of human perception". Having no actual 'self' the only way the Joker can cope with the chaotic barrage of input endemic in the post-modern, information society is to create a new identity each day, hence he is a mischievous prankster one day and a cold-blooded psychopath the next. Morrison's annotated script for the 15th anniversary edition of *Arkham Asylum* contains this glorious footnote concerning The Joker's diagnosis: "I used to have a problem with the idea of the Joker's super-sanity until I developed my theory of Multiple Personality Disorder as the next step in evolutionary consciousness", (a theme he would develop in the more explicitly magical *The Invisibles*). This notion was explored more fully in the character of Crazy Jane in Morrison's *Doom Patrol*, each of whose personalities had its own superpower. The idea was explored, albeit with less subtlety with the X-Men character Legion who shared the same condition.

Dery draws a parallel between the Joker's 'super-sanity' and Deleuze and Guattari's "...radical strategy for survival under capitalism" of 'becoming-schizophrenic' (Dery, 1999:85). The Joker shares the fragmented personality of the schizophrenic, refusing to be, "...the closed, centered subject required (and reproduced) by capitalist society" (ibid). As Deleuze and Guattari themselves put it:

The code of delirium...proves to have an extraordinary fluidity...it might be said that the schizophrenic passes from one code to the other, that he deliberately scrambles all the codes, by quickly shifting from one to another, according to the questions asked him, never giving the same explanation from one day to the next, never recording the same event in the same way (quoted in ibid).

In some respects however, this 'super sanity' or 'higher disorder' is not so much post-human as pre-human(ist). Thus, as has been shown, even when the ideas being discussed here are not presented in evolutionary or psychological terms (that is, 'scientized') the comics often betray pre-modern mystical or shamanistic sensibilities.

THE TRANSHUMAN COSMIC BODY

The emergence of modern cyber-culture, particularly the growth of Silicone Valley, can be traced back to the mystical-psychedelic movement of the 1960s (Sirius, 2004). Among the most outspoken of psychedelic advocates was Timothy Leary, whose presence and influence is noted in many accounts of the dawning of the 'information age' (Kreuger, 2005; Regis, 1992; Sirius, 2004; Slattery, 2008). Taking the development of Virtual Reality as but one example:

The link with LSD was established early on the history of virtual reality. It was, perhaps, inevitable given the interest of Leary. It certainly gave the idea news value for journalists, who at every opportunity tried to lure a very wary Leary...into describing VR as a new form of hallucinogen (Woolley, 1993:24).

As with the counterculture enchanted undercurrents accompany this psychedelic thread in Transhumanist discourse. At least one leading advocate, Ray Kurzweill (1999; 2005), theorises that our posthuman successors will eventually become so adept at the manipulation of energy and matter (which are, after all, the same thing) that they will be able to effectively redesign the universe, using the cosmos itself as an information processor. For Kurzweill this conscious and intelligent universe is "about as close to God" as he can imagine. This "essentially spiritual quest" has certain implications for the status of the body, involving as it does, "...the freeing of our thinking from the severe limitations of its biological form" (Kurzweill, 2009:389). The fixation of some Transhumanists on bodiless minds existing in virtual realities may not simply be a Cartesian humanistic division of body and mind but a more archaic Gnostic or Platonic view that regards the world of matter as an imperfect shadow of a higher realm of pure forms.

The debate about the Gnostic traces in Transhumanist thought is on-going. For every Krueger (2005) who concludes that Trans/posthumanism is not Gnostic but utilitarian there appears to be a Zimmerman (2009) to argue that Gnosticism can be "...discerned in its negative attitude to the human body" and even a trace of the similarly archaic alchemy and Hermeticism, "...in its proclamation that humankind is destined to take control over and transform nature [and] mysticism in its belief that humankind will absorbed into God" in the form of the Singularity (Zimmerman, 2009:13). Zimmerman, provocatively, goes further than most in locating Gnostic

inflections not just in posthumanism but as already present in Modernity's project, and that, "...the goal of the Gnostic-inflected Western humankind is to become God through self-actualisation" (ibid; 9). This sense of Gnosticism, as a kind of self-actualisation, can also be found in the human potential ethic that underlies the work of the Esalen Institute

It comes as little surprise then to find that there are many variations of these Gnostic themes in superhero comics. Klock (2004) suggests that contemporary X-Men comics reflect what he calls a "Gnostic, or pessimistic, Post-humanism". Klock connects the Gnostic denial of the psyche with the process whereby an ordinary human becomes Superhuman. When the Ultimate X-Men's Hank McCoy takes umbrage at his new code-name the Beast for instance, Professor Xavier points out to him "You've just been rebaptized as a Post-Human being. It's ... a name which describes your own skills and personality as opposed to those of a long dead ancestor." For Klock this suggests, "...an identification of the post-human with the pneuma, the Gnostic spark, the antithetical self opposed to the world, the body and the psyche" (ibid:III). Other storylines display clear affinities with the Gnostic strain of Transhumanism. Transcendence through technology for instance is found in the 1977 Avengers storyline *The Korvac Saga* (Shooter et al. 2010).

In this story the title character, Michael Korvac is a 31st century earthman who offers his skills as a computer technician to an invading alien race, the Badoon. Later the Badoon graft Korvac's body onto a mobile computer module, turning him into a cyborg. Later events result in Korvac finding himself in the abandoned command base of Galactus, devourer of worlds. Korvac plugs his, "tri-pronged electronic probe into the station's computer console:

Only to find that knowledge is, indeed, power-and that he had underestimated the impact of absorbing knowledge as boundless as infinity! But by then, it was too late! He had begun to change, to elevate-until at last he was neither man nor machine, but had become—A GOD! (Shooter, et al. 2010:177)



Fig 11: Techgnosis: Korvac in cyborg and god-form

Korvac (above) achieves godhood, later doing battle on “every plane of existence”. Korvac’s transformation from man to man-machine to God, of gnosis through technology, clearly echoes Transhumanism’s Cosmic Body. Elsewhere, science, at least in the form of evolutionary theory, also results in transcendence. In superhero comics then, as with Transhumanism, “science become enchanted, just as magic become ‘scientised’” (Locke, 2005:33) In *New X-Men* the telepathic mutant Quentin Quire undergoes a secondary mutation, apparently evolving into a being of pure light. Klock (2004) writes that the scene suggests, “Gnostic transcendence” and the attainment of post-humanity through the dissolution of the ego. In fact, the attainment of godhood via technological means, and the consequent joys and terrors that follow is not uncommon in superhero comics, albeit mostly the province of villains such as Marvel’s Thanos and the DC villain Libra.

As ever with posthumanism such representations of Cosmic Transhumanity and Superhumanity rest on the concept of the body. Kreuger argues that, “.... in posthumanist visions, bodies do not disappear at all: what has to be overcome is the material, real, concrete biological human body while simultaneously a vast number of new body images were created” (2005:9). Zimmerman

cites Nietzsche in this regard, pointing out that goals of immortality and cosmic mastery are not easily reconciled with Nietzsche's vision of the Overman, who calls, "...for humanity to 'remain faithful to the Earth' and thus to human embodiment' (2009:7). Returning to the relationship between the development of the Human Potential Movement and superhero narratives with this in mind highlights the wisdom in Kripal's observation that whatever constitutes any 'religious wisdom' the mythology of superheroes can be said to possess lies in

Their implied insistence that the mystical and occult transformations of the human being are never simply matters of "the soul" or of "the spirit". They are also and always matters of energy, which is another way of saying the body (Kripal, 2006:144).

HUMAN POTENTIAL MOVEMENT AS EARLY TRANSHUMANISM

If superhero comics can be considered shamanic fictions then it should come as little surprise to find the superhero narrative linked with the emergence in the 1960s of a 'human potential ethic' which, though long present in modern Western societies, and particularly among occultists and esoteric groups, "...only became popular in the 1960s when, amongst other factors, the development of latent abilities was popularized" (Possamai, 2006: 60). At a 1962 symposium of scientists drawn together to discuss the threats of overpopulation and atomic warfare, author Aldous Huxley spoke for the group when he said that, "...The challenge is man's obvious imperfection as a psychosocial being; both individually and collectively, he is sadly in need of improvement, yet clearly improvable (in Weising, 2009:17). The eugenic echo (see the Perfect Body) here is inevitable, but Huxley's words also exhibit a science-cum-shamanistic inflection typical of the discourse of the Cosmic Body being addressed here.

The Human Potential Movement proper entered full bloom in the 1970s when in places such as the Esalen Institute, "...eastern disciplines were adapted to western settings, and this movement developed its emphasis on transpersonal and spiritual experience" (Possamai, 2010:89). The Human Potential Movement, viewed the development of latent abilities as an 'inner adventure' of self-development (ibid). Yet even this most explicitly spiritual take on the posthuman ultimately rests within the body. In his weighty tome the *Future of the Body: explorations into the Further Evolution of Human Nature* (1992) Esalen co-founder Michael Murphy examines

over 3,000 ancient and modern sources from medical sciences, anthropology, comparative religious studies, sports and more for evidence of 'metanormal' human functioning. By seeking to identify those activities and practices that give rise to these capacities, Murphy aims to assemble a coherent methodology of transformative practice. As Kripal summarises:

Murphy's notion of the human potential...insists on the [embodied] human referent of all religious phenomena but reads human being in a way that affirms both the basic unity of the species and the rich ontological possibilities that the history of religions gives witness to... [Murphy's is] essentially an evolutionary mysticism that argues, in effect, that it is biological evolution that drives these mutations (Kripal, 2006:150).

In other words, that becoming-cosmic remains a material transformation to be brought about by embodied practices. The transcendental and the sacred are manifested by, and exist as potential within, the material and profane.

Unsurprisingly, Murphy cites Superman and other science-fictional texts as expressing, "...intimations of capacities that are available to us" (Murphy, 1992:213), much as Jules Verne anticipated atomic power in *20, 000 Leagues Under the Sea*, or H.G. Wells' placement of *The First Men on the Moon*. Murphy wonders if such images, "...might prefigure luminous knowings and powers...that can be realized by the human race". Possamai too has posited that, "...superheroes contributed to the creation of an imaginary doxa of becoming a 'super' self" (Possamai, 2006:60). Kripal (2002) finds it an interesting synchronicity that the foundation of the Esalen Institute-a think tank come retreat set up to investigate human development and informed by the same "evolutionary mysticism" discussed throughout this chapter- and the introduction of the "evolutionary mythology" of Marvel's *X-Men* in 1963. Kripal muses that both cultural visions, "...Imagined an esoteric or alternative academy where the human potentialities of mystical and psychical experience could be projected, educated, disciplined, and eventually stabilized within a set of transformative practices" (Kripal, 2002:66). This constellation of ideas that formed the sixties visions of the Cosmic Body would wind themselves back into the comics themselves. A character in *Animal Man* flung forward in time from the 1960s wonders, "Did it

happen? Did we all drop acid and become superheroes like Leary and Kesey said we would?" (Morrison and Troug, 2003).

It seems possible to suggest that what marks the posthuman body cosmic is its blurring of the distinction between science and magic; the fusion of archaic beliefs with hyper-modern technologies. The superhero genre depends as heavily on this reconfiguration of magic and the transcendental into 'scientific' and embodied terms as proponents of the Human Potential Movement.

Elsewhere, working from Letcher's (2007) typology, I have argued for a discourse of the "scientist-shaman" in talk about psychedelics (Jeffery, 2009). The discourse of the scientist-shaman represents a materialist approach to the shamanic experience; what Leary (1977:15) called an "empirical, tangible meta-physics" (ibid). In fact, before their adoption by the counterculture psychedelics were the source of great intellectual and especially psychiatric interest. In *The Doors of Perception* (1954), a book that would become required reading for the counterculture, the author Aldous Huxley, outlines his experience with mescaline and wrote that such substance were of "inestimable interest for the intellectual". Psychiatrist Stanislav Groff, identified what he called 'transpersonal domains of consciousness', accessible through the use of psychedelics, arguing that researching them would require models, "...far beyond the conceptual framework of traditional psychology and the philosophy of Western science" (1988: 282). Perhaps the most (in) famous of these scientist-shamans was Dr. Timothy Leary, arguably the figure most closely associated with the popularization of LSD in the 1960s.

Leary's work, alongside other scientist-shaman figures such as John C. Lilly and Terence McKenna represent an under-explored (outside of the counterculture) form of posthumanism, with psychedelics recast as evolutionary tools, or chemical technologies. Titles such as *Info-Psychology: A Manual on the Use of the Human Nervous System According to the Manufacturers* (Leary, 1987), and *Programming the Human BioComputer* (Lilly, 2004) offered a kind of avant-garde psychology that envisions the human mind in cybernetic terms; the brain is a 'bio-computer' and psychedelic drugs are considered as software that runs on it.

By the same token, the contemporary human subject, and the social systems that support it and rely on it, is presented as robotic (i.e. 'mechanical' and 'unconscious') at best, stupid and dangerous at worst. Debates about nationality and ideology are referred to dismissively as "mammalian politics" and Leary takes particular delight in describing most human activity as "larval thinking". In Leary's 8-circuit model of consciousness. For Leary (1987) and Wilson (2000), "...the person who can dial and tune the receptive, integrative, transmitting circuits of the nervous system [with drugs or spiritual disciplines] is not just more intelligent, but can be said to operate at a higher and more complex level of evolution" (Leary, 1987:1). In a similar register Terrence McKenna (1992), who played a similar role in the rave culture of the early nineties as Leary did in the sixties, proposed the idea of psychedelics as an evolutionary trigger. His 'stoned-ape' theory suggests, in short, that Neanderthal humans evolved from apes when psilocybin ('magic') mushrooms became a regular part of the apes' diet. The resulting psychedelic effects led to, among other things, increased capacity of imagination and cognitive ability.

Speaking of the technological Singularity, a theoretical future point that marks a posthuman age much discussed in Transhumanism, McKenna describes it as:

Like a transition from a lower-dimensional world, say a world of two or three dimensions, to a world of four, five or six dimensions. This is what I believe actually happens to a human brain-mind system under the influence of psychedelics. So in a way, the best practice for the approaching Singularity is the repeated dissolving and reconstituting of one's personality through the use of psychedelics...a microcosmic anticipation of a macrocosmic event in history (TechnoCalyps, 2006).

If, as has been suggested, critical posthumanism, "...is a philosophical stance about what might be termed a perpetual becoming" (Miah, 2007:23) then McKenna can be seen as suggesting that the repeated use of psychedelics is its praxis. It should come as no surprise then to find that the comic book *Cosmic Body* has itself engaged in such practices, benefitting from the enhancement of chemical technologies. Seen through this lens the history of shamanism becomes a history of 'low-tech cyborgs' (Hess, 1995), *Cosmic Body* posthumans created through the effects of such technologies to the body.

This psychedelic strain of Transhumanism is also evident in the realm of the Superhuman. In fact, superhero comics depict many drugs, both fictional and real. Some of these, like the serum that grants Hourman sixty minutes of power are depicted as generally benign. Although in the alternate DC Universe of *JSA: The Golden Age* (Robinson and Smith, 1993) Hourman is depicted as heavily addicted to his serum and prone to mental instability. In *New X-Men* (Morrison, Quitely and Grant, 2005), the mutant drug Kick enhances the users' mutant abilities while enacting deleterious effects upon the brain. That these instances of drug use enhance the users' powers indicates that they may be taken metaphorically rather than literally. It is not the drug so much, but power (or the thirst for power) that corrupts.

When Stoddart (2006) performed a discourse analysis of 52 comic books and graphic novels he concluded that they reproduced a dominant discourse of negative drug use, mainly focused on hard drugs like heroin and cocaine. However, of the five texts that featured psychedelic drugs, the dominant discourse was one of spiritual drug use, pleasure, revelation and enlightenment. Animal Man's use of peyote for instance leads to a visionary awakening where he is able to look out of the page and into the face of the reader (see illustration below).



Fig 12: "I can see you": Animal Man breaks the fourth wall

Not that the visionary use of drugs need always depicted as benign. In *Kraven's Last Hunt* (DeMatteis and Zeck, 2006), for example, Kraven the Hunter is depicted preparing for his final battle with Spider-Man by engaging in a bizarre pseudo-shamanic ritual- drinking a potion of undisclosed herbs before leaping into an oversized glass tank full of spiders, the better to his absorb his prey's spirit. Without recourse to designations of 'good' and 'bad' drug use it can safely be said that what all these narratives share is a depiction of drug use as transformative. Or, to put it another way, these narratives present drugs as a chemical technology that grants the user some kind of evolutionary advantage.

COSMIC BODY AS SOCIAL INSTITUTION

It is interesting to note in this regard that while the discourse of the Perfect and Military-Industrial body was accompanied by state funding and policy implementations (for example sterilisation laws for the former and military super soldier projects for the latter) the discourse of the Cosmic Body was largely confined to members of the counterculture and independent bodies such as the Esalen Institute. Perhaps the closest that the discourse of the Cosmic Body came to acceptance by the establishment was when the Stanford research Institute published its report *Changing Images of Man* in 1974 (Harmen and Markley, eds. 1982). This research project brought together a number of different academics and intellectuals in order to:

Identify and assess the plausibility of a truly vast number of future possibilities for society. We next followed a method of analysis that determined which sequences of possible futures (that is, which "alternate future histories") appeared to be the most plausible in light of human history and to most usefully serve the needs of policy research and development. Lastly, we derived a variety of policy implications, some of which dealt with how best to continue this type of inquiry. (Markley and Campbell, 1982:xvii).

By illuminating significant ways that Western society has been shaped by myths and images the study goes on to explore key deficiencies of current images of man and identify characteristics needed in future images. The research took place at the Stanford Research Institute and one rumour has it that Al Ron Hubbard was involved in dosing the researchers involved with the

project with LSD. Whether that's true or not, *Changing Images of Man* remains a fascinating historical document. In the conclusion the authors note that as of 1974 a new image of man appeared to be emerging. The authors are optimistic about new vision and describe it in terms very familiar following this chapter's discussion of the Cosmic Body:

The new image reconciles such pairs of "opposites" as body/spirit, determinism/free will, and science/religion. It includes the inner subjective as well as the outer objective world as valid areas of human experience from which knowledge can be obtained... It brings with it the possibility of a new science of consciousness and ecological systems not limited by the manipulative rationality that dominates the science and technology of the present era (Markley and Campbell, 1982:203).

The findings of *Changing Images of Man* are in stark contrast to the state-sanctioned policies dealing with Perfect and Military-Industrial bodies and it is perhaps unsurprising that the more radical, anti-capitalist and anti-imperialist vision of the project- one in keeping with the figure of the Cosmic Body- was not developed further. The process by which the Cosmic Body could be reterritorialised by the interest of the Perfect and Military-Industrial bodies plays out in comic books in their reliance on the iconography established by the Golden Age. Traces always remain. But the process is not univocal. The Cosmic Body can also deterritorialise the others.

For instance, the US military shared with the sixties counterculture a fascination with drugs. There is in fact a long history of the use of amphetamines by the military in many countries to prolong performance while sleep-deprived. More pernicious perhaps was the widespread interest in the military applications of psychedelics. The CIA's MK-ULTRA program which ran from the fifties into the sixties was set up to test LSD's potential as a truth serum and incapacitate. Agents who had been dosed were dubbed 'enlightened operatives' (Sirius, 2004:272). Contrary to the psychedelic discourse of the counterculture however, the ingestion of psychedelics was no guarantee of conversion to pacifist, peace-loving principles. Certainly, none of the agents involved in the MK-ULTRA project were known to have turned their back on the state authority sanctioned violence that was, after all, their job.

Even so, some of the counterculture's rhetoric found its way into the military machine. In 1978 Vietnam veteran Jim Channon embarked on a two year independent study into human potential and advanced human performance. The resulting military field manual, called *Evolutionary Tactics* imagined a supersoldier that combined the courage of the warrior with spirituality of the monk, blending martial arts, meditation, intuition, and non-lethal weapons. Channon imagined ways to make wars less violent for both soldiers and civilians. There is an equally long history of military experiments in telepathy and psychokinesis, and a recent trend has seen the army become interested once again Eastern and alternative practices, such as exploring reiki and meditation as treatments for post-traumatic stress disorder.

CONCLUSION

This chapter presented how the discourse of the posthuman body shifted in the discursive realms of the Superhuman, Transhuman and Post/Human during the 1960s to form a new assemblage. Where once stood the Perfect Body the Cosmic Body now rose to prominence. Plugging itself into the counterculture assemblage the superhero now drew on evolutionary mysticism and the idea of an expanded 'cosmic consciousness' awaiting mankind. While the Cosmic Body had existed as a virtual tendency in the Golden Age it took the generational and cultural shifts of the Silver Age to actualise it. Just as in superhero comics the Cosmic Body manifests in Transhumanism and Post/Humanism as a pre-human form of shamanic irrationality (Deleuze and Guattari's 'higher disorder of thinking') in the latter and a desire for apotheosis in the former.

Having concluded this necessarily brief cultural history of the posthuman body, the following chapters present the findings from interviews with twenty-five respondents on the posthuman body.

CHAPTER 9: BODIES, TECHNOLOGY AND REPRESENTATION

INTRODUCTION

The following chapters comprise the Third Section of this thesis and presents original findings from interviews conducted with readers. The previous chapters presented a rhizomatic cultural history of the posthuman through the discursive realms categorised as Post/Humanism, Transhumanism and Superhumanism. This last category demonstrated how superhero comics' presentation of the posthuman body was contextually bound to the era in which it was produced, both philosophically and technologically. The importance of such a project lies in explicating the various models of posthumanity available and known to the public. Having contextualized the historical development of the posthuman body in superhero comics it is now possible to consider what sense readers make of these narratives and how these might shape their understanding of human enhancement.

Interviewing comic book readers in this way provided the opportunity to test and counter the literature presented in Chapters Two and Three which focused on questions of bodily representation in superhero comics. Less common are those works analysing superheroes as representations of the posthuman. For instance, Taylor (2007:358) argues superheroes well suited to utopian ideals of the cyborg, being a, "...culturally produced body that could potentially defy all traditional and normalizing readings" (ibid: 245). Heggs (1999), by contrast, argues that superheroes, despite their transgressive potential, remain, "...open to naturalization, for example, around the thematic of masculinity" (1999:185). Some of the theoretical and methodological shortcomings of these varied approaches have already been discussed. It is worth reiterating however that even the best of these works rarely turned to actual readers when formulating their conclusions. Maigret puts it best, the shortcoming of such studies is

Lies not in the fact that they provide a list of stereotypes effectively present in the series in question, nor that they analyse all the ideological consequences of the use of these stereotypes; it is their method. It is the object itself that the keys for understanding by

readers have been located, while its reception and all the factors contributing to the production of the content have been overlooked (1999:8)

Having addressed the historical reception and factors contributing to the production of the superhuman body in Section Two, this section turns to the readers themselves. The chapters that follow address the issues raised by Transhumanism and Post/Humanism in turn. This present chapter focuses directly on the comic book Superhuman.

THE PERFECT BODY?

First of all, in keeping with Heggs's criticism, readers were well aware of the 'thematic of masculinity' that marks many superhero comics. When asked to describe what a typical superhero's body looked like almost all respondents displayed a shared understanding of the superhero body as generally male and muscular, often citing this as a 'stereotypical' image. As Danger Man (M, 28, C) put it, "*I've been socialised into a view of the superhero as muscles on muscles.*" In Chapter One it was shown that for some critics, "...the very idea of the superhero presupposes racial purity and ethnic inequality" (Kahan and Stewart: 2006:7) or "fascist wish-fulfillment" (Beaty, 2004: 4). While no respondents took quite such a hard-line there was at least an acknowledgement that superhero bodies could be, as Vesuvian Man said somewhat "*problematic in their uniformity*". Interestingly readers were inclined to associate such characteristics less with German fascism (and its attendant eugenicist policies) than with Americanism. Venkman (M, 31, C) put it most clearly, saying that the typical superhero was marked by an, "*American kind of muscly body kind of style, blue eyes. Quite Aryan in a way*". This seemed to stem partly from Superman's long association with 'truth, justice and the American way'. As will be seen later on the British response to the super-hero as super-patriot appears to be somewhat more ambivalent than that of American readers.

Related to this was also an understanding that superhero bodies needed to look that way because of the demands placed upon them in the stories. If superheroes looked different to the rest of society there was no need to, "*see that as a problem because they are very different to the rest of society*" (Emerald Warrior: M, 24, C) and "*they should look appropriate to what they*

are able to do” (Green Lantern: M, 25, C). For instance, The Flash (M, 32, C) praised the depiction of Marvel’s Shang-Chi, Master of Kung-Fu, for precisely these reasons:

I’ll tell you what’s a good one that I’ve always thought was interesting-Shang-Chi. Master of Kung Fu right? Always shown as basically Bruce Lee but it works because the guy is just lean. He’s just a guy who’s conditioned his body to that sort of level. But it always works. It doesn’t look like a guy built out, in some ways he almost looks quite scrawny because Bruce Lee also had that, like, scrawniness but was just lean with it. Mm-hmm. He had muscle-definition but he wasn’t like Schwarzenegger or Stallone muscles. He was a guy who just toned up and dropped all the fat off him. Shang-Chi has always been very, very well captured in comics I think.

Despite this shared understanding of what Venkman (M, 31, C) described as the, “*Superman aesthetic*”, being, “*the default template for superheroes*”, there were certain characters that some readers felt should never be drawn in this manner. As will be seen below, the X-Men in particular provided evidence that, “*superhero bodies come in all shapes and sizes, sometimes even no body at all*” (Red Hulk: M, 20, C). Outside of the X-men the character that respondents felt most strongly about in terms of bodily depiction was Spider-Man. For Emerald Warrior (M, 24, C) the reason,

Spider-man has been so successful as a character is because he looks like anyone. I think that his body is, it’s a way of showing his personality

Similarly, The Invalid (M, 37, R) praised the work of Spider-man co-creator and artist Steve Ditko:

Ditko’s spider-man is quite a kind of realistic, he’s quite a geeky sort of teenagery, skinny guy and that brings a lot more power with it rather than having a big muscle-bound superman. You need, I think you need that grounding in reality and also that feeling of vulnerability as well to be able to kind of identify with the character properly.



Fig 13: The hard body and the vulnerable body: Rob Leifeld’s Captain America and Steve Ditko’s Spider-Man

Committed readers also displayed an awareness of historical-aesthetic trends in the depiction of Superhuman bodies. Of particular note was the way several respondents cited Rob Liefeld as an in the presentation of superheroic bodies as in the following exchange:

Interviewer: *What do you think of when you think about superhero bodies?*

Green Lantern (M, 25, C): *Uh (laughs) can I say that Rob Liefeld picture of Captain America? (laughs)*

Green Lantern’s laughter here demonstrates an awareness of both the infamy and ‘absurdity’ of Liefeld’s style. Cited by several respondents as an example of a bad artist, Rob Liefeld’s work has become synonymous with the hard-bodied style of the late 80s/early 90s Dark Age of comics discussed in Chapter Seven, and was described as, “*very much a thing of the times*” in the words of Emerald Warrior (M, 24, C). A notorious example of Liefeld’s art and his unique approach to male anatomy can be seen above (and is the same picture Green lantern refers to). This bracketing off Liefeld and the Nineties art-style he has come to represent indicates a distancing from such aggressively masculine imagery by both male and female readers. It is important to note however that the response to such titles during that time was not homogenous. Brown (1991) points out that for many readers of the Milestone comics being produced

contemporaneously with the work of Liefeld and his fellow Image artists there was already an ideological schism of sorts. As one reader told Brown, "...I really like the Milestone titles for what they're not-namely, Image Comics" (1999:35). Brown also notes that the Milestone characters appealed to readers because they offered an alternative to this extreme hyper-masculinity, emphasizing brain over brawn. Indeed, this focus on mind over matter will be returned to again in Chapter Eleven.

Readers were quite capable of acknowledging the typical superhero body as 'absurd' or 'ridiculous'. Out with of the Liefeld/Image comics aesthetic however this absurdity was not necessarily a cause for critique. The outlandish proportions of the superheroic body were, "*understood not to be reality*" (Rogue, FM, 27, C). Rather, these bodies were "kind of a uniform"; signifiers of the genre rather than representations of an achievable reality for the human form. Vesuvian Man (M, 36, C) articulated this position most clearly:

It's just a stylistic quirk isn't it? The way that they are depicted in manga for instance is equally uniform but they are a different set of iconography. I think in part its useful to remember that comics are only in part realistic and part a series of codes which allow you to infer meaning...that's part of the visual language of the superhero comic that allows you to understand who is the superhero and who isn't. That's part of the language of it.

Respondents made similar theoretical exceptions for the way female characters were depicted although there was a divide of sorts between male and female readers. Like the typical male superhero body the bodies of superheroines were also seen to have defining traits, succinctly summed up by Slothor (FM, 29, C) as:

Tits, no hips. Big boobs. Long hair that doesn't exist in any realm of humanity and unbelievably long legs

For an occasional comic book reader like Ozymandias (M, 26, O) this sort of depiction was, "*one of the things that put me off superhero comics as I got older*". Interestingly, perhaps

depressingly, committed male readers were far more willing to forgive such imagery. The words of Ergon Cube (M, 34, C) are not untypical in this regard:

It's a male market, comics, when you come down to it. It doesn't really affect me one way or another. I don't really think about it too much.

This is a view backed by comic shop proprietor Arkham (M, 43, C):

It sells. It makes me money so I can't object that strongly.

There was however an understanding shared among committed readers that the excessive signifiers of femininity for super heroines had much in common with the excessive signifiers of masculinity for male superheroes. As Rogue (FM, 27, C) put it, "*it is absurd! That's why it's okay, because it's within a realm of fantasy*". This chimes in with the views of Barker (1989) and Reynolds (1992) that questions of ideology and representation make no sense within generic narrative forms such as the superhero comic because these representations can only be understood within the rules of genre they appear rather than having any referent to the real world. Or as Vesuvian Man (M, 36, C) puts it:

So a lot of the sort of people getting upset with the amount of cheesecake in superhero comics, getting that mixed up, they're going oh women don't really look like that. Yeah. Woman don't really fly or wear spandex outfits and they don't have bubbles coming out of their head

The problem with female characters, it was suggested, was not pictorial representation but a question of storytelling. As Rogue (FM, 27, C) put it, the unrealistic depiction of the super heroine body,

Only becomes an issue if the story makes it an issue. If the story telling around the female characters is weak it becomes, well, you really are just a blonde with your knockers out, you know?

The X-men series in particular had a strong pull for female readers. Indeed, even for male readers the X-Men appeared to be a superhero comic that avoided depictions of “*the standard hunky man*” (Logogram: M, 30, C). X-men’s popularity outside of comics due to the films and animated versions offered even occasional readers a vision of the Superhuman that did not conform to this standard. As Ozymandias (M, 26, O) said, “*when I think of superheroes I do think of mutation*”. Female readers such as Rogue (27, C) meanwhile praised the X-men for being a “*gender equal kind of team*” in which, “*the women are very distinct from each other; they have very distinct, different personalities*”. In X-Men the question of mutation trumped questions of gender:

To a certain degree the body image isn't as important. If you're the beast or something yes, the physicality is important. But, the gender stereotyping isn't the core of it. You're not being rejected because you are female. You are being rejected because you can steal someone's life energy, accidentally or on purpose. You are being rejected because you have fireworks coming out of your hands. There are bigger issues at work than just physicality (Slothor: FM, 29, C)

One particularly illustrative division in this regard centred on the X-men character Emma Frost/White Queen. For male reader Red Hulk (M, 20, C) Emma Frost presented a particularly egregious example of how female characters could be sexualised. Female reader Rogue (27, C) however noted that

I love Emma frost, I think she's brilliant. Um, and you know, she goes around wearing less than any another comic character I've ever known in my life. But her, she is, she's a three-dimensional, especially in Astonishing X-Men and Joss Whedon, she's a massively three-dimensional character in that, and you really do get a feel for who that person is.

Again, the depiction of female bodies was only seen as problematic within the context of the story rather than simply the drawing. Never the less, alternative comics were also praised for their more realistic depictions of female bodies. Slothor for example, when asked if she thought female characters were well represented in superhero comics, replied:

No. No. That was one of the things that initially attracted me to Strangers in Paradise. I've always been a bigger lady and I remember going to a comic books store with my mate and we picked up Spawn, was it Angelica? And it was bronze goddess sort of look, and Strangers in Paradise where it was Francine on the front in a skirt that was too tight and being awkward and physically clumsy and I like, again; I liked her character because I thought she was believable. I empathised with her. . I think initially when I was younger, seeing that comic and going 'ooh, real person!' made me buy it.

THE SUPERHUMAN AS FASCIST

As has been shown, respondents displayed a reflexive attitude towards the representation of the posthuman body in superhero comics. Although many were aware of the perceived problems of such depictions, and even in agreement on some points, it remained the case that the superhero's body was not read as being a model of reality, or an achievable goal, but as a type of 'code' in Hall's (1973) terms. Superhero stories are a recognisable genre (Coogan, 2006) and any genre is dependent upon a consensus of meaning between producers and consumers as to the meaning of those codes (McQuail, 1987); for instance, the use of white or black hats to indicate good and bad characters in Westerns (ibid). Within the rules of the superhero genre large muscles indicated a character's status as 'superhuman'.

These findings are an important rebuke to the unexamined assumption persists that the representation of superheroes bodies somehow has a pernicious effect on readers' minds, as in the largely untested hypothesis that media portrayals of the 'supermale' are related to the occurrence of muscle dysmorphia in preadolescent males as suggested by Baghurst et al. (2006) or Beiras's (2007) view that superheroes lead readers to consider superhero bodies as a normative ideal for male corporeality, a point also unproblematically stated by Klein (2007) who explicitly coins the phrase "comic book masculinity" based on the assumption that, "...the Hulk, Superman and their counterparts are definitely embodiments of hegemonic masculinity" (2007:1100), or Lamb et al.'s (2009) argument that superheroes inculcate young boys into accepting a dangerously narrow vision of masculinity. As seen earlier, the notion of the Perfect Body has been linked to the idea that the superhero must then be a fascistic figure.

The data obtained from respondents in this study suggests a very different picture to the assumptions put forward by the authors above. Indeed, in some respects these findings are closer to Deleuze and Guattari's suggestion that, "... contrary to a deeply rooted belief, the book is not an image of the world" (1987:11). Rather than a presentation of reality, the comic book is a machine, it is something which does things rather than signify things, an assemblage that, "...connect[s] bodies up with other bodies, affects, and social formations in many different directions" (Malins, 2004:95). Viewed as assemblages, texts are a mix of discrete parts capable of producing any number of effects, as opposed to the organized, coherent whole that produces a single dominant reading. While it remains true that in comic books, "...a muscular physique can portray traits that include power, dominance, strength, sexual-virility and self-esteem" (Baghurst, 2006: 87), this does not mean that it *must do*. The Superhuman body is not a totality in which the components are fixed, but an assemblage whose same components can play different roles in other assemblages.

This concept is elaborated upon in Chapter Twelve. At this juncture it can be said that while the representation of the Superhuman body, which, as was shown in the cultural history, does indeed have rhizomatic connections to a certain fascistic take on the body, is not defined by those connections. The Superhuman body is capable of forming new connections. So certainly the Superhuman body remains largely as it was laid down in the Golden Age, but it must do in order for the codes of the genre to be understood. Deterritorialisations are possible, but, "...you have to keep enough of the organism for it to reform each dawn...you have to keep small rations of subjectivity in sufficient quantity to enable you to respond to the dominant reality" (Deleuze and Guattari, 1987: 178). In this sense, muscles serve the same signifying function in superhero comics as capes and colourful costumes; they allow the reader to respond to 'the dominant reality' of the superhero genre and simultaneously allow the superhero genre to be understood by the reader.

This accounts for Rogue's argument above that the depiction of female superheroes only becomes problematic at the level of story rather than image. It also accounts for the way occasional readers such as Ozymandias were 'put off' superhero comics. The Superhuman body has no intrinsic meaning but is made to mean in the union between comic and reader; it does differently things depending on the reader, or rather, reading-machine, it is plugged into. For

committed and regular readers who have repeated this conjunction enough times have developed what Pustz (1999) calls “comic book literacy”, a unique ability to comprehend and appreciate the formal aesthetics of comic books in a particular way; a deep knowledge of its rules and conventions. Within this reader-text assemblage a becoming takes place in which is, “...each term deterritorialises the other to become something else” (Hainge, 2006:100). The casual reader (if they are not so put off by the Superhuman body that they never return) becomes a literate reader; while what may be perceived as embodiment of hegemonic masculinity, for example, becomes simply a genre trope and understood as signifiers of superhuman power within the rules of the genre, but not read as necessary for power and self-esteem in the real world. Indeed, a more recent study by Young et al (2012), soon to be published in the journal of Social Psychology empirically suggests that men who felt a bond with characters like Batman and Superman also felt more satisfied with their own bodies while men who felt indifferent towards superheroes felt worse about themselves after seeing images of the same character.

Perhaps for this reason most respondents were dismissive of the notion that the superhero was a fascistic figure. These responses ranged from the sympathetic, as with Spawn (M, 28, C):

You can see why people would, if they really wanted to analyse it, say that it's promoting an ideology. But the ideology is basic human decency. If you really want to vilify something for saying 'people should stop bad things and help good people' then I don't know if they are the type of academics where I'd go to their dinner party and not be ejected. Yeah, yeah, how bad that superheroes tell kids to drink milk and help old women across the street. It's like a really friendly type of fascism there. Sort of decency

To the more defensive:

I would say that says more about them than it does about me. If that's how you want to read into it then by all means crawl into your ghetto and think narrow minded thoughts. It's a story; we're reading it for the story, that's just how it happens to come out. I mean by that way of thinking surely we shouldn't have heroes like The Thing; you know he's a monstrous creature; surely he should be bad guy?

Arkham (M, 43, C)

THE SUPERHUMAN BODY IN FILM AND TELEVISION

More problematic though, for both male and female readers, was the manner in which bodies were presented in film and television. These 'real' images were compared unfavourably with the level of distance afforded by the drawn imagery of comic books. As Ergon Cube (M, 34, C) puts it:

I don't think that's true of comics because it's more, because it's completely fictional, a drawing. Movies maybe, I can see why people would feel maybe a bit inadequate because popular culture these days dictates we should look a certain way if you are to be desirable. But it's justified in comics. They need to look like that for what they do. But in movies it's different. Or celebrity culture with people starving themselves. Size zero and all this stuff.

For Rogue (FM, 27, C) there was a clear distinction between the allegedly sexualised costumes of superheroes and the images of women presented in film and television. Acknowledging the absurdity of superhero costumes she said,

It's within a realm of fantasy. That's why it's okay to go around in your knickers and a breastplate, as opposed to if a woman's basically supposed to be, you know, if you were to take [the television series] Ally Mcbeal situation where she's supposed to be a lawyer but is wearing a skirt that is literally like three inches thick, that's why it's so ridiculous, that's why it look, that's why people have a problem with it. Whereas if you want to be saving the world you want to be wearing a breastplate and a pair of knickers, you know what I mean?

She went on to say,

If you look at something like Wonder Woman who is an overtly feminist female hero, she is I mean, she doesn't look all that different from anything else. She's in a breastplate

and a pair of knickers. Um but its its it's really not about that because there's the story of the character that backs it up but it's not trying to convey anything. It's not trying to say if you want to be a successful person in business, if you want to have a marriage and kids. It's saying if you want to fight a big demon this would be, this has very few things that catch (laughs).

In short, while the respondents acknowledged at least some pressure to measure up to-or resentment of- the bodily standards found in film, television and advertising, their understanding of the superhero body depended upon a comic literacy which meant that for the most part readers were disinclined to compare their own bodies with those on the page. In keeping with the notion that superhero bodies were absurdly proportioned, respondents agreed with Vesuvian Man (M, 36, C) that comparing one's body to that of superheroes, "*would be a difficult comparison to make*". Indeed, most felt like Emerald Warrior that they, "*never wanted the huge muscles or anything*". A few respondents noted that such bodies could be found in the real world in the form of body-builders but that such physiques were both impractical and, more importantly, "*involves work, really hard work*" (Venkman: M, 31, C).

As Danger Man (M, 28, C) put it:

I always feel that their body is not obtainable without various; Batman couldn't have the body he has and still go out every night fighting crime. You would need to spend your life just working on it and working on it, so it's; I view it as really unobtainable.

At most respondents might occasionally be inspired to think about going to the gym. Bodily concerns bought up by the imagery of superheroes centred on health rather than aesthetics. As Green Lantern (M, 25, C) said, it is not a case of going, "*oh, I wish I could look like that, it's more a case of, like, I wish I was in slightly better shape*". On a related note, while all respondents expressed an interest in the possibility of superpowers generally the idea of having a superhero's body was not deemed necessary. Again, the depiction of superhero bodies as muscular is seen to be a signifier of superpowers rather than a prerequisite.

REPRESENTING THE TRANSHUMAN BODY

Just as the superhero body was read as iconographic rather than a representation of an existing or achievable reality so too were the way science and technologies were presented in superhero comics. It is interesting in this regard to note that only a handful of readers felt that superheroes had anything to say about Post/Humanism or Transhumanism:

As an actual comic book reader you don't get the intellectual discourse heaped upon you...they are kept very separate from each other.

Spawn (M, 28, C)

Throughout this thesis I have suggested that the broad category 'posthumanism' can be thought of as comprising three discursive realms. These are the critical-philosophical tradition I have termed Post/Humanism, the popular/speculative tradition of Transhuman and their fictional representations in films, novels and comics, the latter of which I borrow the term Superhuman (a broader category than superhero) from. As Spawn observes in the quote above these discursive realms were felt to be separate from each other. Only a minority of interviewees felt that superhero comics dealt in any serious way with the question of posthumanism. For those few who did it was because they felt that superhero comics dealt with the effects of becoming posthuman either on an individual or societal level:

It's [being superhuman] presented to the world as amazing but backstage such and such is going on, you know? There's always that, it's always balanced, it's never, "well, life would be better if we just did this". Comics always play on the 'what else'? The 'what else' is the interesting bit. So as a model of what humanity could become in the future it's, I don't know, you're always given the alternatives or the dark side to it, or the yin and yang of what's happening. That's what makes it interesting.

Durinsbeuk (M, 42, C)

Well I think they have always kind of shown how, like, posthumans live with the rest of the society. Like Superman trying to live like an ordinary person in Metropolis and all the recent Marvel stuff with Civil War. I think that's a more realistic sort of approach to, how would society react to people running round with superpowers? They are going to want

to control and know who they are and train them and stuff. So I think superhero comics are good at, not laying the groundwork, but exploring what it would be like in the real world.

Venkman (M, 31, C)

As a general rule however respondents were dismissive of the idea that superhero comics had any relationship to posthumanism. Rather, science and technology in superhero comics were seen to function in the same way that the superhero's musculature did. Which is to say that techno-science in superhero comics was viewed as unrelated to real world techno-science. Rather than a direct representation of scientific advances, technology in comics was a signifier of superpowers.

It's almost completely irrelevant why they are [super-powered] that's not what the story's about-why they are-it's about what they do once they are there since they exist.

Rogue (FM, 27, C)

It is a necessary plot tool rather than an in-depth discussion.

Midi (M, 30, R)

The superhero is an accidental invocation of those ideas.

Vesuvian Man (M, 31, C)

In all, superhero comics were viewed as a shallow allegory of posthumanism. By contrast several literary science-fiction novels were held up as superior examples of exploring the idea. One of the quirks of the genre, as elaborated upon in Chapter Eight, is that science and magic are often conflated in superhero universes, or at the very least sit happily side by side. This was the essence of the problem for many:

I don't really see superhero comics and Transhumanism as that closely related because the superhero genre is all about what if a few people accidentally, by magic basically, had these superpowers...Transhumanism is about what are the real ways that we can do

this rather than the ridiculous, imaginary, magic backstory of the superhero (EYE BORG, M, 29, O)

[They deal with] technological responsibility, but equally the power comes from being an alien or an amazon or a mythological god...I wouldn't really say that its massively connected to the idea of progressing technology any more than its married to the notion of demi-divinity (ROGUE, FM, 27, C)

Interestingly, this conflation of science and magic exists both at the level of narrative and representation, for as Venkman (M, 31, C) pointed out:

If you're talking magical characters you've got like Doctor Strange but are you also counting the Silver Surfer as a magical character? Because he wields the 'power cosmic', which on the drawn page is no different from being Doctor Strange

As such it is interesting to recall that cyborg imagery can be found in classical mythology—"mythical and fantastical ideas about human/machine hybrids are present from the stories of Icarus' wings to Chinese, Greek and Arabic texts that are rich in the subject of automata" (Miah, 2007: 15). Contra Haraway, both the cyborg and the goddess can be considered boundary figures, "...designed to transgress the borders between the human and non-human...[to] recast the non-human other in the role of subject, actor and agent in his/her own right" (Lykke, 1996:24). Techno-science functions not as representation but as signifier in comic books. Like the superhuman body, so often fused with technology, or to put it another way, inscribed with science, technology indicates power, as does "*being an alien or an amazon or a mythological god*".

CONCLUSION

This chapter has highlighted how respondents viewed the depiction of the Superhuman body in terms of genre rules rather than as a representation of any actual human body. Indeed, they were quick to highlight the apparent absurdity of the Superhuman form. This argument runs contrary to those scholars who have presented the superhero genre as either fascistic or otherwise reactionary. This interpretation was true not just of how bodies were depicted in

superhero comics but also technology. Like the muscles of the superhero, drawn depictions of science and technology come to represent an abstract notion of “powers”. These findings have interesting implications for the public understanding of human enhancement technologies. Much as we can no longer accept the notion of ideological textual determination so too must we assume that the public understanding of enhancement technologies does not follow a linear line of influence. As Bates writes of using science fiction for the transmission of knowledge about genetics, “...rather than reading a newspaper article or a sci-fi novel and adopting its viewpoint...the public reads these messages and integrates them with prior media messages to create new ideas” (Bates, 2005:60). As such, while respondents made no direct connection between the enhanced humans of the comic book realm and the concerns of Transhumanism it still remains to ask what these participants made of Transhumanism and its goals. It is to this question that the next chapter turns its attention.

CHAPTER 10: POSTHUMAN FUTURES: INEVITABILITY AND FUNCTIONALITY

INTRODUCTION

The previous chapter addressed the question, “what sense do readers of superhero comics make of the posthuman body?” and focused on the discursive realm of the Superhuman. As has been highlighted throughout this thesis however, the posthuman body is formed of an assemblage of overlapping discursive realms. Any understanding of how readers make sense of the posthuman body must also then consider these other domains. The current chapter focuses on the discursive realm of Transhumanism and how readers responded to the idea of human enhancement in the real world.

EMERGING TECHNOLOGIES NOT MERGING TECHNOLOGIES

The philosophy of human enhancement and the progression beyond the human is predicated on the development of a number of emerging technologies. Because the study and development of these technologies is often interconnected they are often grouped under the term ‘converging technologies’ and various acronyms have arisen to define them. For instance, NBIC, an acronym for Nanotechnology, Biotechnology, Information technology and Cognitive science, or “GRAIN”, for Genetics, Robotics, Artificial Intelligence, and Nanotechnology. Respondents displayed awareness of disparate emerging technologies but did not tend to merge these strands into an over-riding vision as in Transhumanism.

A number of different technologies were raised as potentially contributing to our posthuman future. Life extension, genetic engineering, cybernetic implants: *“a USB port would be somewhere on my body”* (Spawn, M, 28, C); exo-skeletons; cloning and the growing of artificial organs; nanotechnology and pharmaceutical drugs. When interviewees highlighted any such technology it would usually be accompanied by a real-life example (e.g. *“Like the blind fella who got his eye replaced with a camera”* (Venkman, M, 31, C)). These findings are in keeping with the fact that both scholarly approaches to the public understanding of emergent technologies and scientific policy papers on the same (e.g. Coenen et al. 2009) rarely position Transhumanism as a

goal and tend more often to focus on subcategories of specific technologies such as Information Technology (Bostrom and Sandberg, 2011) nanotechnology (e.g. Lee et al, 2005; Schuefele and Lewenstein, 2005) or genetic technologies (Lassen and Jamison, 2006) instead. As with the respondents, the emphasis lies on specific emerging technologies and has not yet reached a stage of debate in which all these technologies have merged under the rubric of Transhuman technologies (as I have described them throughout this thesis).

This was particularly true in the case of prosthetics; by far the technology most commonly cited whatever the level of familiarity with posthumanism as a whole. Midi's (M, 30, C) is a typical response in this regard:

I'm certainly aware of the on-going work with prosthetics, I believe, I don't know how far along they are but I believe they are getting closer to having some kind of prosthetic that connects through the whole nerve ending. I'm aware of the on-going work around that, I don't know how far along they are with it but I'm aware of that. Replacement limbs is something that we are going to see in our lifetime, as far as I'm aware they are well on their way to genuine replacement limbs rather than a fairly stiff, limited limb. So I know that works on-going, I suppose that's true of a lot of research but I know that's something that's happening.

By contrast technologies such as nanotech and mind-uploading, the radical potentials of which still appear some way off, were illustrated with examples from fiction. For instance, one episode of the sci-fi sit-com *Red Dwarf* in which a swarm of nanobots repair a character's arm, was cited approvingly by three respondents, highlighting a generally understood notion that nanotechnology could repair human bodies at a molecular level, even growing new limbs for them. The main touchstone in terms of comic book depictions of nanotechnology was the *Iron Man: Extremis* storyline (Ellis and Granov, 2006), in which nanobots allow the title character's armour to co-exist with his body rather than simply worn as an exo-skeleton. While both these examples refer to fiction rather than 'real-world' advances in nanotechnology they fit the mould of 'nanowriting' highlighted by Milburn in the chapter on the Military-Industrial body whereby the science-fictional status of nanotechnology and militaristic visions of the super soldier have come to, "...rely on cultural familiarity with comic book myths...to suggest that nanotechnology,

in replicating or materializing these myths at the site of the soldier's body, can create “real” superheroes” (Milburn, 2005:85). Such findings are in keeping with those of Scheufele and Lewenstein (2005) and Lee et al. (2005) whose inquiries into the public understanding of nanotechnology suggested a low-level of overall awareness of the issue. Never the less people were found to rely on heuristic or cognitive shortcuts such as “ideological predispositions, religious beliefs, and media portrayals, in order to form judgments about issues, such as nanotechnology, that they know little or nothing about” (Scheufele and Lewenstein, 2005: 660). This observation can be nicely illustrated by the following exchange.

Interviewer: If you take AI [Artificial Intelligence] for example, there's a few of them [Transhumanists] that argue that we've got a moral obligation almost to create AI.

Arkham (M, 43, C): Yeah, how many stories have you seen that end well in?

Interviewer: Well, not a great deal. But that's interesting isn't it because that maybe brings us back to what we talked about in the second half about how much it's possible to use fiction as a sort of, as a way of engaging with the world and these ideas. So in that sense when I talk about these technologies do you think your reading of fiction has...

Arkham: Well it's undoubtedly influenced how I think but then I could say that about a newspaper or a website or a text message. Like I say I think of it as reading. People who make these bizarre artificial distinctions puzzle me.

As seen above, by far the most commonly raised technology was prosthetics. When describing prosthetics respondents often made a clear link with disability:

Prosthetic is still very expensive and new for the masses. You've got, you know, disabled people. It's more their community. It's also more the association you make, I think we would make at the moment.

Shiva (FM, 32, O)

I think they are doing quite well with prosthetic limbs. Like replacements for amputees.

Spawn, M, 28, C

Knowledge of prosthetics moved beyond simply traditional imitations of lost limbs. Respondents drew attention to their use by paralympians, particularly the “*springy, jumpy, like kangaroo legs*” (Danger Man, M, 28, C) worn by Oscar Pistorious (though none mentioned the athlete by name). Interestingly, it was also noted that these prosthetic limbs actually brought their users not just up to but also *beyond* normative levels of functioning:

There was a guy who lost his leg and they have those sorts of kangaroo shoes and he'd had them put on instead of feet basically and he can run faster than any person. I think that's pretty cool. That's totally achievable if you want to cut your legs off.

Ozymandias (M, 26, O)

For some this implied an obvious connection between disability and Transhumanism:

I think that's kind of Transhuman in a really acceptable way. Nobody would have an argument with giving that person robotic legs. Obviously the next step is when someone cuts off their legs and gets a pair of robotic legs put on and as far as that goes I think everyone would have a bit of a problem with it somewhere along the line

Logogram (M, 30, C)

The link with disability presents prosthetics as “*Transhuman in a really acceptable way*” because it is a form of replacement. Even though this replacement might be considered an enhancement in that it improves a level of bodily functioning its initial function as merely a replacement results in the enhancement not becoming “*a bit of a problem*” as it might if an able-bodied person had chosen to enhance himself deliberately. This general position seems likely to change in the near future. Already a number of scholars and commentators have begun to question whether such technologies constitute simple replacement limbs or Transhuman enhancements. (cf. Swartz and Watermeyer, 2008) As will be seen in the next section one possible explanation for this general knowledge and acceptance of prosthetics is their clear *function*.

FUNCTION NOT FUN

Perhaps the most important factor in determining reader's responses to enhancement concerned the question of function. Individual enhancement was criticised as being akin to either cheating but also to fashion or plastic surgery. Effectively this sort of enhancement was dismissed as pointless. Instead, respondents argued for the functionality of enhancements. More correctly, restoration rather than enhancement was suggested as the most appropriate use for emerging technologies:

Its shouldn't be done for the fact you can do it. It should be done for a reason or a function.

Danger Man (M, 28, C)

As has been seen, the use of prosthetics was the most widely known and understood of Transhuman technologies. However, prosthetics were thought of as restitutive rather than enhancing;

If someone said, "Do you want a robot arm?", if I'd lost my arm? Give me a robot arm! But I wouldn't right now [say] "take my arm and give me a robot arm".

Dutch (M, 32, R)

Out with of the medical use of these technologies to get people up to normative levels of functioning physical enhancements were also accepted as having functional uses elsewhere:

I see that you would want to use an exo-skeleton, again, in the construction industry or possibly in military applications. But why would you or I want it?

Arkham (M, 43, C)

What is of note here is the way in which these apparent criticisms of Transhuman enhancement highlight the ways in which Transhumanism might (re) present itself and its arguments to the public in a palatable fashion. On the one hand, human enhancement was generally seen as more acceptable when linked to forms of therapy that respondents were comfortable and familiar with such as prosthetics. Perhaps Transhumanism is simply too new a concept for most.

At least one study has suggested that novel ideas can trigger feelings of uncertainty that make people uncomfortable so that people will dismissed creative ideas in favour of ideas that are purely practical - “tried and true” (Meuller, 2011). It would be unwise to generalize from such a small study of course but it remains striking how few respondents warmed to the idea of superpowers.

In fact only a couple of interviewees advocated enhancement for its own sake. A good example is the following:

It’s just wish-fulfilment isn’t it? Just being able to lift a car over your head. That must feel great, you know?

Venkman (M, 31, C)

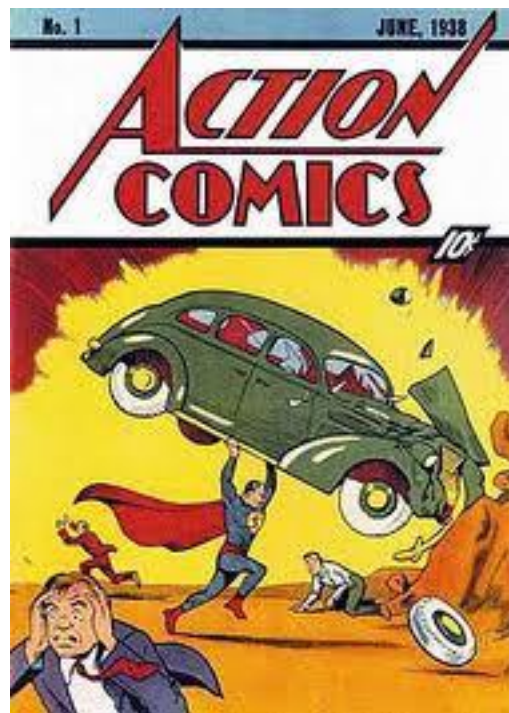


Fig 14: Action Comics Issue 1

It hardly seems coincidental that the image Venkman utilises here is familiar from the famous first appearance of Superman. It is probably worth noting how respondents answered the most pressing and obvious- if not the most theoretically exacting- question a study such as this must

address: if you could have any superpower, what would they be? Here respondents were told they could be as fantastical as they liked. Among the answers were the ability to heal rapidly, to control magnetism, invisibility (“because I’m nosy”) and “a prehensile tail that I could use to pick things up with”. Most common was flight, perhaps unsurprisingly. This was true of readers of occasional, regular and committed readers. As Midi put it, “we’d all like to be superman for instance, you know what I mean? And fly around”. Two other powers, teleportation and super speed, were offered only by some committed readers and both for reasons that were related to reading habits. The ability to teleport for instance required an aesthetic element:

You get up, you shower, you have breakfast, you put your clothes on and ‘bamf!’ And of course it would have to make that sound. It would have to sound like ‘bamf!’

Danger Man (M, 28, C)



Fig 15: Nightcrawler’s trademark “BAMF!”

Bamf! Is the iconic sound-effect made by the X-Men’s Nightcrawler and has become as much a part of the character as his unique appearance (as seen above). The choice of super speed was equally rooted in knowledge of comic book lore:

Alright, so you can move very, very fast. So that’s good, um, you can move so fast that you’re invisible, that’s how fast you can move. So that’s two powers right there. You can vibrate your molecules so fast that you can pass through walls. So now you’ve got

intangibility, right? It's looking good. You can run so fast you can go back in time. So now you've got time-travel. So just having super-speed you get four for the price of one. Which is always good.

The Flash (M, 32, C)

Super-strength, interestingly, was not a particularly common choice, while in Cartesian contrast super-intelligence and memory were valued highly. These choices were mirrored in respondents' views on the possibility of human enhancement, a point addressed in more detail in the next chapter. Also in common with respondents' views on enhancement was a focus on the pragmatic aspects of superpowers. Speed and teleportation for instance would make it possible to get more work done, again emphasising function over fun.

The collective vision of posthumanity that might be patched together from the interview analysis is curiously pessimistic for the most part, not to mention paradoxical. Respondents argued for the necessity of function but at the same time these functions support the very economic and social structures that give rise to concerns about the use of these technologies. Rarely expressed was the idea that these technologies might result in overcoming such economic and military-industrial concerns. Put another way, rarely were these technologies viewed as capable of overcoming the current status of humanity.

The emphasis on function and restitution suggests a *techne* that encompasses not only material scientific practice but also the rationalisation of thought as well, something akin to what Habermas (2003) warns of as the "instrumentalization" of human nature. Though suspicious of the abuse of these technologies by those with economic or political power, it remained difficult to imagine their application through any other lens. The spectre of the eugenicist Perfect Body and the Military-Industrial ghost of posthuman future seemed to haunt the imagination. It is worth remembering in this regard that the converging technologies that Transhumanists believe will usher in our posthuman future are largely presented in terms of their economic and industrial benefits rather than their capacity for radical human enhancement out with of Transhumanist writings. For instance when the National Nanotechnological Initiative was announced under President Clinton a 2000 White House press release was entitled "Leading to the Next Industrial Revolution". As Schummer puts it, "the visionary powerbox has largely been

reduced to economic promises” (2005:5). Moreover, as was seen in the chapter on the Military-Industrial Body, even the ‘visionary powerbox’ of Transhumanist thought largely rests on a libertarian vision of unfettered capitalism.

WHO WATCHES THE WATCHMEN?

Although a posthuman future was largely considered in some sense inevitable it was also generally thought of in negative terms. Abuses of power and the potential for warfare were put forward as part and parcel of any posthuman future. These concerns were many but can be usefully considered under the following categories-concerns about the military use of such technologies and the creation of ‘cyborg soldiers’, concerns surrounding genetic engineering, and economic concerns.

A) CYBORG SOLDIERS

For example, the application of Transhuman technologies to the art of war was taken for granted:

It probably will be like military and soldiers first. I would like to think it will be good and there will be loads of smart people using it for good but that’s not the way the world works.

Dutch (M, 32, R)

Respondents were resigned to this state of affairs whatever their ideological leanings for historical reasons:

If you think after the First World War all the people with scars and lost limbs led to an increase in prosthetic limbs and things

Danger Man (M, 28, C)

I mean it's obviously the military that drives all these things isn't it? So I'm maybe not happy with the way that these things are developed but at the end of the day the military is probably responsible for most of our technological developments

Vesuvian Man (M, 36, C)

That's the worrying thing; if it's, obviously if it starts off in the wrong hands. But the only way it's going to develop is if they get enough money and whatever, or a good enough reason to convince the president that they can, you know, spend billions of pounds on these things. They're not going to give it to some crackpot scientist; they're going to give it to the military

Midi (M, 30, R)

There is good empirical evidence to back up these apparently intuitive understandings. In Chapter Seven it was noted that military spending in the US alone was over \$400 billion in 2005 (Evans, 2007). Much of this spending financed various supersoldier projects, such as the \$50 million awarded by the US Army to create the MIT Institute for Soldier Nanotechnologies (ISN) (Milburn, 2005). This resignation to the role of military finance and development formed part of a broader suspicion about how contemporary society would be affected by Transhumanist technologies. As Lee et al. point out, "...people's reactions to and attitudes toward new technologies are also often guided in part by the trust and confidence they have in scientists, companies, and government agencies" (2005: 248). Moreover, this reliance on trust is said to have an enhanced effect, "...if individuals lack scientific knowledge" (ibid). As Transhumanism as a philosophy was little known to the participants it can be seen that responses to the idea were mediated by levels of trust in state apparatus in a largely critical way, as will be seen in more detail as we continue.

As discussed in Chapter Seven, the Military-Industrial Body has often been used to implicitly or explicitly address military use of enhanced humans. Venkman (M, 31, C) observed that this trend, while particularly prominent among the more contemporary creators of the British Wave, has long been a part of the genre:

Interviewer: *Are there any superhero comics that you think deal with or represent the military industrial complex?*

Venkman: *Um, probably The Ultimates. Not fully because at the end it's still Marvel Comics so there are rules. Things like, I think, Stormwatch when Warren Ellis was doing it and parts of The Authority... It's quite easy for a comic to use that kind of platform to launch stories off. Like, Iron Man is a military industrial character and when he was created he was an arms manufacturer, so it's always been there in comics. To have lots of weapons and lots of money.*

While Venkman's statement points to a potential critique of the Military-Industrial posthuman body in superhero comics it remains to be seen how this impacts on the real-world search for super-soldiers. It would seem reasonable to think that Transhumanist thinking may be more in evidence. After conducting a bibliometric survey of a number of terms related to Transhumanism in military and government publications, however, Evans simply concludes that, "...transhumanism, as a philosophy, does not yet impact military science in any significant way...though the idea of transhumanism itself has yet to take hold on those working in military strategy, military science, and policy making, the technological foundations of transhumanism are already affecting the literature" (2006: 164).

B) GENETIC ENGINEERING

Also of concern was the issue of genetic engineering. More specifically, the question of what society defines, genetically, as human. Bates (2005) found that, however questionable the science, the mutant X-Men were a recurring source of genetic information for lay people. Respondents in this study were less inclined to make the link between superheroes and genetic modification but still expressed worries. In one form this manifested itself in concerns like the following:

If it's a case of, you know, "okay, we're going to alter our child's genes so that he will not be gay", that would be a line where you'd go, no, that's wrong.

Green Lantern (M, 25, C)

At the other end of the spectrum were concerns about possible future transgenic species that were neatly summed up by the question:

Are you still a human citizen if you have starfish DNA?

Red Hulk (M, 20, C)

Although the actual terminology of eugenics itself was mentioned infrequently in the interviews, the questions raised above speak to those concerns. Interestingly, while these concerns relate to what this thesis has dubbed the Perfect Body it was the more contemporary manifestation of the Military-Industrial Body that was more in evidence. These concerns were less historical (e.g. eugenics) than political-economic. As with military spending there are good reasons for these concerns, both historical and economic. Lassen and Jamison note that in the US in the 1980s the, "...dominance of commercial discourses-that is, stories of business opportunities- [...] helped pave the way for a positive policy and regulatory framework for biotechnology" (2006:9). A low level of public trust in industry and science related to genetic technology has been noted in other studies (Lassen and Jamison, 2006). This mistrust is rooted in what Lassen and Jamison term 'political economic concerns', "...issues of corporate power and responsibility, commercialization of research, the links between science and business" (ibid: 26), which are rarely addressed in the commercial or business-minded discourse of policy makers. Indeed, the interviewees in this project expressed similar concerns to those expressed by Lassen and Jamieson's focus groups.

C) HOMO ECONOMICUS

In fact, the concerns raised most often were economic. In its macroscopic form this was a question of social divisions:

It [human enhancements] becomes a way to increase separation of rich and poor and class divides and things like that. You know, you end up with those that can afford the enhancements and those who can't. Which obviously is a gap that's going to perpetuate itself.

Eye Borg (M, 29, O)

On a microscopic level this economic concern focused on the problems of individual enhancement. Indeed, for Eye Borg the problem with superheroes as a genre was that, *“it’s about you being the only one-what if you were better than everybody else?”* Moreover, as a self-described Transhumanist himself Eye Borg criticised the libertarian impulse in much Transhumanist thought. This was addressed in more detail in the discussion of the Military-Industrial body but can be summarised neatly here in Lilley’s observation that the Transhumanists;

Accept social competition as the way of the world. Expanding on a celebrated argument from Adam Smith, they assert that overall wealth will increase as social competition drives personal innovation. For example, health, mental acuity, and personal productivity will improve as individuals *“enhance to advance”* (forthcoming 2013:70)

A paradox emerged whereby respondent’s generally emphasizing function over fun, but also generally embraced a critique of the very social systems that such technologies would function *for*. This is expressed in Eye Borg’s concerns about class divides above but also more obliquely in the exchange below, in which Arkham passingly compares capitalizing on human enhancements with the point of view of the super villain.

Arkham (M, 43, C): *Um, I suppose in a real-world scenario I would be more inclined to see the villain’s point of view in that if you’ve got this freakish ability then why aren’t you capitalizing on it? But I don’t think you need to be robbing banks to be capitalizing on it. Why are there no characters out there who simply have a superpower they want to take advantage of? If you’ve got super strength for example why is there nobody with super strength working in the construction industry?*

Interviewer: *Right.*

Arkham: *Why do you need to be one of the spandex crowd? I mean for obvious reasons it’s the story context of you need the conflict between character A and character B*

(PAUSE) Yeah, from a purely pragmatic point of view if I had superpowers I would be able to make some practical application of them. Some way to improve my life rather than “truth, justice and the American way”.

Other concerns related to this free-market ideology. Durinsbeuk (M, 42, C) for instance suggested that any mass adoption of human enhancements would be predicated on celebrity sponsorship:

David Beckham decides to sell his left foot so you can now bend balls further. Nike foot you know? Yours for 2000 pounds and no guarantee. Is there a need, is there a market, is there a want?

Although not stated explicitly Durinsbeuk’s words suggest a relationship between needs, wants and the market. From a Post/Humanist perspective this is particularly intriguing, pointing to the notion that there may not be a “*normative* form of the individual who awaits liberation from the imposed illusions of culture...we cannot assume real interests, nor some pre-social and essential individual that we might discover underneath power and images” (Colebrook, 2002:92). Instead social, economic and cultural forces shape individuals, and their wants and needs. Thus, Midi (M, 30, R), while wary of the idea of enhancement generally still accepted that his mind might change with the surrounding culture:

See that’s, that’s such a difficult thing to consider because I think; it would totally depend on the culture. For example, if all my friends did it, and everybody in my family had it I would probably feel some more pressure to have it. I quite like my limbs. I would have no problem if my friend chose to have it but I don’t know if I would necessarily. Not because I have any moral problem with it but I don’t know if I would. But if I was somehow disadvantaged as a human for not doing it because everybody else had done it then I probably would. But I don’t think I would do it for the sake of doing it. I don’t think I’d be the guy at the front of the queue. I think I’d wait to see what happened and see if my life was disadvantaged by not doing it

For most interviewees however the idea of individual enhancement, or enhancements as a consumer good, were seen as

Just a new way of judging people, isn't it? It's, if you don't have the money it's like fashion now. You're not cool at school because you don't have a Bench jacket or because you don't have a Paul's Boutique bag. Well you're not cool because your eyes aren't the perfect or you can't run as fast as an athlete so you're some kind of freak

Slothor (FM, 29, C)

Slothor's point here is not so far removed from that of McKibben (2003) who worries that human enhancement technologies will only be available to those can afford them, creating a 'genetic divide' alongside the economic divide between rich and poor. The criticism on this individualistic streak in Transhumanism can also, it will be seen later on, be understood in terms of the British relationship with the superhero. Just as British writers (and readers) considered the superhero through a deconstructive lens or from a semi-ironic distance so too does the European approach to human enhancement differ from that of U.S. policy documents. This has been the case since at least the 1980s when the discourse of economic prosperity and business opportunity helped shape the policy frameworks for biotechnology in the US. By contrast, as Lassen and Jamison (2006:9) point out, "...European discourses during the same time period were more ambivalent, and in many countries the dominant discourses focused on health and environmental implications rather than commercial prospects". This trend has continued into more contemporary Transhuman technologies such as nanotechnology. Johnson and Youngman point out that the U.S. National Science Foundation's report on converging technologies (or the NBIC suite) emphasises individual enhancement at the expense of any, "...role for the humanities and social sciences, the two areas of study that help us to contextualise scientific and technological developments" (2011:254). In contrast, the European response to the U.S. NBIC report places a greater emphasis on these two disciplines. In short it "contains less trans-humanism and more humanism" and suggests that, "...humans do not exist above their physical environment, but within it" (ibid: 255). It is probably worth noting Rifkin's (2005) concern that the genetic advances cited earlier will converge with economic issues in the future in the form of commercial or market-driven eugenics.

D) INEVITABILITY

However respondents felt about the question of human enhancement, one clear theme in the interviews was the inevitability of a posthuman future:

It's going to happen anyway. These technologies will be developed, whether by us or whether by somebody else. It's going to happen. We're going to have super-prosthetic limbs in the future. In my head that is just inevitable.

Midi (M, 30, R)

Sometimes this inevitable future was millions of years away (ARKHAM) or at least far enough away that it was possible to feel

Pretty indifferent to it. Neither embracing it nor rejecting it because I'm going to have very little to do if it comes about; I'm not going to be here for very much longer...and to be honest it's not; I don't really give a shit what happens once I'm dead. Humanity could end up on the bonfire. We could all go on to be semi-cybernetic inner-space creatures or we could all devolve back into being some kind of lizard creature and its really going to make bugger-all difference to me

Rogue (FM, 29, C)

But it was always simply a matter of time. Lilley's (2007) survey of how young adults perceived transhumanity revealed much the same findings. Even though 3 out of 4 of Lilley's respondents displayed a negative attitude towards transhumanity Lilley found that "more than twice the number expressed resignation as they did opposition." (2013:62), taking instead a position of fatalism and inevitability. Moreover, in analysing the three (interrelated) strong claims for inevitability made in Transhumanist literature—evolution as on-going, homo-cyberneticus and the drive to self-transform ingrained in human nature and exponential technological change—Lilley finds that, "...critics may find it easier to dismiss the Transhumanists' assertion that it will turn out good in the end than to dispel the common belief that there is no stopping change" (ibid: 67). Certainly the results of this thesis' data analysis suggest the same.

Instead we find a vision of technological progress closer to those proposed by Ellul than any Transhumanist writer. In his book *The Technological Society* (1964) Ellul argued that 'Technique has become autonomous; it has fashioned an omnivorous world which obeys its own laws and which has renounced all tradition' (Ellul 1964:14) viewing complex interdependent technological systems as being shaped by technology itself rather than by society and ominously warning that, "...there can be no human autonomy in the face of technical autonomy'" (Ellul 1964:138).

Certainly Donna Haraway's maxim that "we are our technologies and they are we" (1991:180) was not widely adhered to. Nor her cyborg vision of a technological future without binary structures, gender identities and-following these- hierarchical power relations. But nor was it entirely absent. For some respondents our current relationship with communication technologies contracted that time-scale considerably:

It always just seemed to me a slightly weird divide between we're currently human and soon we will be transhuman. We are already there.

Logogram (M, 30, C)

Despite this feeling of inevitability, or perhaps because of it, suggesting as it does a certain lack of agency in relation to the posthuman future, few positive futures were offered outside of those interviewees who broadly aligned themselves with Transhumanist goals. The specific features of these concerns are set forth in the next chapter. Of interest for the time being is where this sense of inevitability sprang from. Certainly, as stated above, respondents displayed some awareness of a variety of emerging technologies so it could be simply a matter of imaginative extrapolation. What is clearer is that superhero comics rarely played into their considerations of these possible futures.

CONCLUSION

This chapter has shown how respondents made sense of the prospect of Transhumanism. In keeping with the previous chapter's findings that respondents did not as a rule make a connection between the Superhuman and the prospect of actual human enhancement, so too was the philosophy of Transhumanism largely unknown to respondents. Respondents were aware of certain technologies, notably prosthetics, but such technologies were not pulled together under the rubric of human enhancement. Instead the emphasis was on restitution and function. Perhaps because of this emphasis on function over recreational or aesthetic enhancements, respondents expressed several concerns relating to the Military-Industrial applications of such technologies, whether in the form of super soldiers or the exacerbation of already existing social divisions. Despite these concerns however a posthuman future was also seen as inevitable, and a curious lack of agency in relation to this 'inevitable'-and markedly Military-Industrial- posthuman future was in evidence.

CHAPTER 11: POSTHUMAN BODIES/POSTHUMAN MINDS

INTRODUCTION

Having considered the Superhuman and the Transhuman in the previous chapters, this chapter considers how the participants felt about the more complex philosophical territory of the Post/Human. The most pressing theme in this regard was the question of mind/body duality. As demonstrated in Chapter Two, Post/Humanism is intimately concerned with addressing this dualism, often presented as the bedrock on which conceptions of the human rest. Indeed, while discussing enhancements with the participants Descartes's ghost was always near, with many articulating some formulation of this philosophical perennial. In fact, for most respondents selfhood was situated in the mind rather than the body. Indeed, the body was variously described as "*a great big machine*" (Rogue, FM, 27, C), a "*physical shell*" or "*vehicle*" (The Invalid, M, 37, R) or even a "*carcass*" (Midi, M, 30, R). The body was even presented as

An evolutionary dead-end...human-body evolution is driven by having to adapt to the environment but humans have reached the stage where we can control the environment so humans aren't going to evolve anymore physically. The only way is with the mind.

Ergon Cube (M, 34, C)

This emphasis on the mind rather than the body helps to explain another interesting trend in the responses whereby participants self-identified as 'readers' (a pursuit of which comics were a sub-set), and a tendency to view reading as an intellectual pleasure as much as simply entertainment. This trend appears to be common to readers of superhero comics, as Brown (2001) has noted. Brown also noted another important trend, comparing the comics put out under the African-American Milestone imprint with the mainstream output of Marvel, DC, or (especially at that time) Image comics. Brown notes that, "...for many fans the Milestone universe offers a novel (black) masculine ideal for comic books, one that stresses compassion and *intelligence rather than physical force*" (2001:198 emphasis added). While Brown focuses on a very particular set of readers and comic books, the interviews undertaken here revealed a similar trend among the British readers who took part in this project, particularly for committed readers.

THE HUMANISM IN SUPERHUMANISM

To what extent can the superhero be said to embody the concerns of critical-philosophical Post/Humanism? As was seen in Section Two, the depictions of the Perfect and Military-Industrial Superhuman body suggested certain affinities with Transhumanist visions of human enhancement. But they could also be used to critique themselves and even to trouble the very notion of what it means to be human, especially in the case of the Cosmic Body. As discussed in previous chapters, readers did not generally make a connection between the Superhuman and the Transhuman, so it is of little surprise that the Post/Human also failed to be addressed explicitly. In fact, it appeared that many readers preferred an emphasis on the 'human' in 'superhuman'. As Rogue (FM, 27, C) said of the X-men for example:

They are human. It's just extra. So this idea of dual identity...and that's what I quite like about X-Men. It's very psychological, it's very much about how do you integrate into your identity when the world has an issue with what you are. Um, so, I don't know. That's what I like about it (laughs).

Rogue's focus on the 'humanity' of the superhero was echoed by others:

I mean I kind of prefer Superman as a human character, kind of the human perspective on the character. So there's kind of, I do prefer that human, the idea, the powers are fascinating, the powers are lovely but a flavour, but it tends to be the person behind them that I identify with more.

Green Lantern (M, 25, C)

It's aspirational. Its uh, it's the fact that you could, I don't know, they teach you to be the best that you can be kind of thing. In particular I guess Spider-Man originally he was the everyman sort of superhero wasn't he? He's got the same problems you've got. But he's a superhero as well. Yeah. I'm sort of more drawn to the superheroes that have human problems. I mean it's kind of hard to relate to a billionaire who dresses up as bat and

beats people up at night but in the hands of the right writer you can put pathos and stuff in.

Ergon Cube (M, 32, C)

This notion of the superhero as human was linked to the notion of morality. Ergon Cube's words above are telling in this respect- "*it's aspirational...they teach you to be the best that you can be kind of thing*". As will be seen in the next two sections, respondents had a strong tendency to link being 'human' and morality with the mind rather than the body.

SUPERHUMAN MINDS

In keeping with the idea that superhero bodies were not obtainable ideals but signifiers of super heroic abilities, respondents expressed more of an interest in minds than bodies. Note the words of one respondent, who, when asked if he had ever compared his body to that of superheroes, replied,

No. The only ones I've ever, perhaps Batman again, just because of the making something of himself I find quite an interesting narrative. But not his body in particular.

Vesuvian Man (M, 36, C)

Danger Man (M, 28, C) also provided a couple of clear illustrations of the celebration of minds over matter in superhero narratives:

There's a really good story that I liked in Justice League International where Blue Beetle- Ted Kord -puts on loads of weight. So he doesn't fit into his costume anymore. And he starts being picked on, Guy Gardner starts mocking him saying, ah, this that and the other, "you're a pudgy guy, fat little guy". So he challenges him to a boxing fight...Ted Kord beats him by boxing smarter, boxing clever. It's like in Green Lantern 25, not 25 the previous one, where Guy Gardner had a boxing match with Hal Jordan to see who should be Green Lantern of Earth. Guy Gardner's saying how Hal Jordan's a waste of time and he's old while Guy Gardner's got a young, youthful body. Well once again, these stories happened at a similar time, Hal Jordan gets one up on him and outlasts him. Guy

Gardner is depicted as being stronger but Hal Jordan beats him by being smarter. So I can see the bodies but I'm always looking more at the minds.

This emphasis on the mind was not purely about cognition however. Superhero comics also traded in stories of moral intelligence. Even an occasional reader such as Shiva (FM, 32, O) shared this interpretation:

Interviewer: Both the hero and the villain have posthuman bodies but what do you think it is that makes one character use their powers for good and another one use them for evil?

Shiva: It's the brain. It's what they can think about using their power for. Yes. Thinking of, "oh I can take over the world with my power" or, it seems like the villain always want some sort position for power but the hero doesn't really care about that, they care more for the girl or the guy, stuff like that. Not out for their own gain. So it's basically what they think, what they want.

For regular and committed readers of superhero comics in particular it was important that these were above all 'heroic' stories. However, this relationship to heroism manifested in two forms that we might describe as reflexive and non-reflexive. In the non-reflexive mode superheroes comprised a genre in which the idea of the hero as an essentially moral figure was a source of inspiration:

Well I think there's just, there's something kind of heartening about there being these kinds of stories which are about people who do the right thing

Green Lantern (M, 25, C)

I like the fact they try and better themselves, try and pick themselves up and work towards a greater goal and have sense of duty, responsibility

Danger Man (M, 28, C)

Superhero comics, from this perspective, excelled in addressing the question of what it took to be a hero, to “do the right thing” as Green Lantern puts it above:

A hero has to, Batman is a hero because there is a genuine, a hero has stuff, it has self-sacrifice. It is about, it is, self-sacrifice is almost the key to what being a hero is. It is about laying down your life, it is about being a noble cause, it is about there being something worth fighting for, it is about what do you fight for?... And I'd definitely say that what we have in the superhero kind of comics genre is very much akin to mythological ideas of heroism

Rogue (FM, 27, C)

For others this same focus on morality and heroism was a source of critique. In this self-reflexive mode the heroism of superheroes became an irritation. Superman in particular, perhaps because of the character's positioning as the first and archetypal superhero, was frequently held up as embodying these problems:

I don't like Superman because I think he's boring. He's, my problem with him as a hero is he's too good; he's perfect. He's kind, he's charismatic; the perfect Mom and apple-pie sort of thing and that's dull.

Slothor (FM, 29, C)

In fact, the majority of readers fell into the self-reflexive category when it came to the morality of superheroes. As such, rightly or wrongly, Superman was often held up as a model of simplistic morality and not a particularly popular character among this group of readers. By contrast Batman was frequently invoked as a more interesting character possessed of a more complex morality:

There's two examples that immediately spring to mind and one is that kind of Batman/Superman presence of different kinds of moralities and frequently clash over it, you know?

Vesuvian Man (M, 36, C)

More broadly, reflexive morality was demonstrated by affection for morally ambiguous heroes and an acknowledgement of the dangers posed by possessing such powers. As Green Lantern (M, 25, C) put it:

It's a case of that whole power and responsibility thing um, like I said earlier, would it be really cool to have like a set of Iron Man armour? Yes. Would it be incredibly nerve wracking to have that sort of power at your disposal? Probably as well.

I don't like my heroes to be martyrs. I want them to do the good thing despite the fact they don't want to or despite the fact they're forced to or flawed with it, or conflicted. I don't want them to do it just because they should.

Slothor (FM, 29, C)

Such attitudes can be related to the British context outlined in later Chapter Twelve, whereby British creators were largely responsible for deconstructing and undermining many of the assumptions and tenets of the superhero narrative and this reflexive attitude seems to be largely shared by British readers. Readers preferred a level of moral complexity, or at least to problematize, in their superhero narratives. The idea that a super-powered being would be morally untouchable was both unrealistic for most readers and, more importantly, uninteresting. But there was also an acknowledgement of another recurring theme, one rooted in mythos of superheroes-power and responsibility.

This acknowledgement that superhero comics celebrate the mind over the body is worth highlighting for a number of reasons. Firstly, it goes against the frequent criticism that superhero comics celebrate physicality over the mind. Coupled with the data on the superhero body as iconographic, assertions of fascism being embodied in the form of the superhuman become a great deal less tenable. As one of Brown's (2001: 168) interviewees described it, "...it isn't always the guy with the biggest arms that wins...it's the guy with the biggest brain". Secondly, as will be seen in the following section, it chimes well with the fact that most respondents, when asked which sort of enhancements they would take if at all possible, chose cognitive rather than physical ones.

TRANSHUMAN MINDS

While physical enhancements (e.g. prosthetics) were generally viewed ambivalently, respondents were much more inclined to embrace the idea of cognitive enhancements. This sympathetic attitude to enhancing memory and intelligence also chimed with the trend for participants self-identifying as 'readers':

Well generally I'm more into, like, reading and writing and discussions and things than actual activity is what I enjoy. So physical enhancement...that's not, it doesn't interest me as much

Ozymandias (M, 26, O)

If that [cognitive enhancements] became available to me I would take it. I'd be excited to try something like that.

Midi (M, 30, R)

Cognitive enhancements were also the most commonly used. Psychedelic drugs are discussed in more detail below but for now it is worth noting that two respondents had tried 'smart drugs' in the past while another explained that even in the case of psychedelics

More or less the reason I still originally took mushrooms was because I felt like I wanted to be cleverer

Logogram (M, 30, C)

These findings are in keeping with what is already known about the use of 'smart drugs' such as Adderall, Ritalin and Modafinil. Some estimates suggest that around 7% of US students have used these prescription drugs for the purposes of cognitive enhancement while others estimate the figure at 25% (Greeley et al. 2008). Outside of these drugs, forms of mental training such as yoga and meditation are commonly used, while allegedly brain boosting substances like caffeine, energy drinks and herbal stimulants such as Ginseng or Gingko biloba are found in ordinary supermarkets (Bostrom and Sandberg, 2008:29). That such a market exists suggests

that of all the human enhancements discussed in this thesis it is likely that cognitive enhancements may be adopted most quickly. As Bostrom and Sandberg note there are already,

Many extant regulations [are] intended to protect and improve cognitive function. Regulation of lead in paint and tap water...mandatory education, folic acid fortification of cereals...by contrast, we know of no public policy that is intended to limit or reduce cognitive capacity. Insofar as patterns of regulation reflect social preferences, therefore, it seems that society shows at least an implicit commitment to better cognition.

(2009:331)

Even if this is the case, widespread adoption of cognitive enhancers faces several of the conceptual hurdles noted in this chapter, not least of which is, "...a change in the view that medicine is only about restoring, not enhancing, capacities, and concomitant changes in the regulatory regime for medical trials and drug approval" (ibid: 332).

It would be fair to say that for almost all the participant's intelligence was prized above physicality; mind over body. A general vision of humanity's 'inevitable' evolution into posthuman being thus emerged that emphasised this cerebral transformation and the body as excess meat. Often, though not always, this emphasis on the mind over the body made respondents more amenable to the idea of enhancement. A position neatly summed up in the following quote:

It's the sense of self. It doesn't matter really what the container is, consciousness and the self, the concept of self, I think is what makes us human rather than the body, so it doesn't matter whether it's in a computer somewhere or some nanobots, it's still a human being to me.

Midi (M, 30, R)

It would be impossible to piece together a coherent picture of what the participants in this project took to be human. The divide between those who were pro-enhancement and those who were troubled by the idea might first appear to suggest an insurmountable opposition as to the nature of the human and the limits of the human body. In fact, both positions pivoted on notions of effort, or striving.

For instance the following quotes highlight one recurring critique of enhancement:

It takes people's natural abilities away from them. So what if you can run fast on your own? All on your own merit? I can run fast because I've taken this drug or had this enhancement...it takes way natural talents and stops people developing. Where's the need to try if you can just get given it?

Slothor (FM, C, 29)

You're advancing yourself but you're not pushing yourself. You could get robot legs; you could get super robot legs and then the next day you could get super-robot legs version 2.0, or something. But you're not doing anything; you're having these things done to you. Because of that you're losing the capacity to push yourself, your losing the ability to better yourself. You're being bettered. Um, so, you're losing your drive. Why push yourself to be better if things can just fall in your lap?

The Flash (C, 32, M)

For respondents such as Slothor and The Flash human enhancement was morally troubling, akin to cheating somehow. Indeed, this was even true at the level of text. Green Lantern noted that when Pepper Potts, a popular supporting character in Iron Man, was given similar enhancements to the title character it frustrated him because he felt it:

Implies that it makes her mind faster and stuff as well, and it's like that potentially diminishes her as a character because it means anything, you know, clever that she does isn't necessarily due to her...so there's an element of that that kind of frustrates me from a storytelling perspective because it removes agency from the characters.

Green Lantern (CM, 25, C)

In fact these criticisms are a feature of many oppositional attacks on Transhumanism. McKibben (2003) for instance fears that radical enhancement would deprive humanity of the desire and focus to achieve greatness, and that any greatness would be attributable only to the enhancement and not the individual. In the end, McKibben argues, human enhancement "...will destroy forever the very possibility of meaningful choice" (2003: 190). Such views depend on a figuration of humanity as necessarily limited in its capacities, although, importantly, this was not viewed as a negative by the participants who felt this way for as McKibben puts it "...all the harmonies that make human life wonderful and special depend on the approximate shape of a human life" (ibid: 160). In fact it was these very limitations that gave meaning to being human. Inevitably the most pressing of these meaning-giving limitations was death; the mortality of the human body:

Interviewer: I asked you earlier if there was anything essentially human-

Shiva (FM, 32, O): It's you deal with life and death. You deal with suffering and happiness and a hell of a lot of emotions in between.

In short, this particular conception of humanity saw being human as being embodied:

You can tell my history with my scars. Or where I've broken a bone or where I've done this, that or the other. My body; my life story can be told.

Danger Man (M, 28, C)

Unfortunately I have chemical things wrong that make it very difficult for me to lose weight so weight has always, will always and has always been an issue for me. But the things that are wrong with me are what make me who I am

Slothor (FM, C, 29)

Interestingly, respondents who emphasised consciousness over embodiment as the seat of the human also highlighted the importance of striving to better us. While participants who

emphasised the body saw meaning in striving within limitations (see below), the second group strove to go beyond them:

I mean, you know, we are the product of billions of years of evolution and the idea that the first point at which we realise this should be the point at which we stop is ridiculous isn't it? That's, why here? Why stop at this point? There's no reason, it's just this is what we're familiar with.

Eye Borg (M, 29, 0)

Moreover, from this perspective not choosing to enhance was morally dubious:

If you do that [choose not to enhance] what you are saying is, "we are always going to be exactly as we are now". All the flaws and problems, all that we have. You know, we are going to condemn ourselves to have forever for every generation to come

Eye Borg (M, 29, 0)

The body's limitations are in fact something to be overcome:

The body, I mean, we're kind of restricted by them aren't we? The mind there are no restrictions

Ergon Cube (M, 34, C)

As Hanson writes, one effect of human enhancement on how bodies are viewed could be that, "... what is now considered healthy or normal will increasingly be thought of as defective or disvalued as enhanced states become the norm...what was once 'normal' or 'healthy' becomes something from which we suffer" (1999:125) and the body, it would seem, becomes excess meat. For a smaller section of respondents however, it was the body and not the mind that was the seat of the self. As such, the division between mind and body is worth exploring in more detail, leading into two more binaries familiar from Post/Humanist theory-the natural/artificial and reality/fiction.

NATURAL/ARTIFICIAL

In considering possible posthuman futures participants repeatedly made a distinction between natural and artificial evolution. Natural evolution was described most forcefully in the following quote:

It's genetic. Technology is fuck all to do with it.

Arkham (M, 43, C)

This was a common distinction. The use of technology to enhance humans was viewed as a separate process to the 'natural', *genetic* process of evolution. The distinction can be seen in the following description of what one respondent discovered after Googling 'posthuman' prior to the interview:

It's about human 2.0. I couldn't tell from what I read if it was about adjusting humans mechanically with technology or if it was about evolution and trying to sort of evolve to these levels.

Ozymandias (M, 26, O)

The important terms here are "adjusting humans mechanically" and "evolve to these levels". This opposition between human enhancement as mechanical or artificial compared to the more 'natural' process of evolution was another recurring dualism, stated again here for emphasis:

My first thing is natural evolution and the kind of future we might evolve as a species naturally, but I also kind of think about artificial intelligence and kind of cyborgs and that kind of thing...the use of machines and enhancing our bodies and minds

The Invalid (M, 37, R)

This demarcation between a natural, genetic evolution and an artificial, technological enhancement suggests that we are some way from a commonly held acceptance of the cyborg ontology put forward by Haraway for instance. This commonly shared dualistic thinking about body/mind and natural/artificial seems particularly telling in light of Chapter Nine's discussion on the representation of superheroes. The empirical evidence provided by these interviews runs

counter to ideological readings of the superhero-which usually evoked an imagined readership at the mercy of the superheroes incipient fascism-suggesting that reader' relationships with superhero texts were far more nuanced and reflexive. As such, this thesis critiqued those readings that did not address readers themselves. However, it is not just negative readings of the superhero that fail to address the audience for the texts under discussion. Much of the work on posthumanism falls into a similar trap, presenting their Post/Humanist analysis of popular texts without stopping to consider what readers and viewers themselves make of them. At the very least, the data presented here shows little evidence of a widely accepted impulse to blur categorical binary distinctions.

This has implications for public decision making on emerging technologies. As Lee et al. demonstrate, the assumption that, "...people will be more open toward new technologies if they know more about them-holds true only for respondents whose cognitive considerations are not overridden by emotional heuristics" (2005:261). That these 'emotional heuristics' or 'affective aspects' are by their nature corporeal means that:

Concerns or fears, which are more a function of the potential severe outcomes or of the vividness of potential risks rather than of objectively quantifiable probabilities or expectations... [Showing that] (1) Affective processes often precede cognitive evaluations and (2) people's judgements about science and technology are sometimes based not on analytical judgement but on a general feeling about science and technology (Ibid: 244)

This distinction between natural and artificial is particularly intriguing in light of the fact that most respondents emphasised the mind over the body as the essence of being human. In spite of the focus on consciousness our genetic make-up (the consciousness of the body?) still possessed what Nelkin and Lindee (2004) call the 'DNA mystique'. For some this was a moral question;

The concept of improving ourselves doesn't bother me although I do have, I'm not necessarily against it but I find stem cell research more morally difficult. I don't know why...cars, phones, whatever, but when you start using genetics it's weird for me.

Midi (M, 30, R)

In some respects this moral objection to the genetic engineering of human traits is related to religious anxieties. This is true of much anti-Transhumanist literature and Midi, quoted above, said that his own ambivalence over stem-cell research specifically was the '*ambiguity over the status of the foetus*' as a "*potential human*"; a concern he related to his Catholic faith. Similarly Bainbridge has found that approval of various Transhuman technologies, "...is negatively associated with confidence in religion, and positively associated with confidence in science" (2005:4). Meanwhile, Lilley's (2013) survey of how young adults perceived transhumanity found that nearly 3 out of 4 held negative attitudes towards transhumanity with over 90% indicating that religion would suffer. While most respondents in this current study expressed a general atheism or agnosticism, it remains clear that religious views will do much to contribute to how the public views human enhancement. More commonly, ethical concerns about genetic research were related to historical precedents. As was seen in the previous chapter, the spectre of eugenics and the abuse of power that genetic and technological enhancements might yield was a common and pressing concern. It is perhaps unsurprising then to find that for many readers superheroes excelled in dealing with moral questions.

FICTION/REALITY

It has already been established that superhero comics are not generally read as representational in the sense of directly reflecting a posthuman worlds. Moreover, humanist distinctions between mind and body or the natural and the artificial largely remained in place for most respondents. Never the less, just as Post/Humanism represents a 'fictive theory', or a cyborgian fusion of 'social fact and science fiction', so, on closer inspection, did the lines between the participants perceptions of reality and fiction prove to be more porous than at first appeared, opening up to the possibility of at least some Post/Human blurring of categorical distinctions.

For instance, there was a general consensus that yesterday's science fiction often becomes today's science-fact. An idea that was most often put forward in quite matter-of-fact terms:

Everything starts out as science fiction doesn't it?

Ergon Cube (M 34, C)

It is the thing of science fiction; the fact that it's becoming reality is absolutely fantastic as far as I'm concerned. I'm absolutely fascinated by it.

The Invalid (M, 37, R)

This apparent acceptance that what separates science-fiction from science-fact is not a question of reality but temporality helps to make sense of the commonly shared idea that a posthuman future was inevitable, or simply a matter of time. But there is some evidence that Transhumanism will blur these categories still further. A 2006 interdisciplinary meeting convened by the American Association for the Advancement of Science to address human enhancement ends with the suggestion that the AAAS

bring scientists to the table with science-fiction writers and/or Hollywood producers. Many science-fiction writers and producers have already engaged in imaginative thought experiments about what a world marked by extensive HE might look like. Feedback from such groups might help to flesh out interesting new dynamics to address. (Williams, 2006:19)

This kind of blurring of the line between social fact and science fiction is typical of posthumanist critical theory of course. More abstractly the line between reality and fiction was blurred in the present by what might be described as an affective or emotional reality to their reading experience. Howe (2012) points out that following the introduction of the character Kitty Pryde to the X-Men in 1980 young readers began writing to Marvel asking how they could be her boyfriend. These younger readers wished to cross the boundary between real life and the comic book page. Although the readers who took part in this study were all adults there were still expressions of this ontological insecurity.

And here it is expressed specifically about superheroes:

It's another cliché but they are a friend of yours aren't they? You know peter Parker. He's a friend of yours.

The Flash (M, 32, C)

The appeal for me of Peter Parker-this is going to sound the most geeky thing you've probably ever heard, is that he was sometimes more like a real person than many real people to me because I know that character so well...you feel as if he's more like a best friend to you than anything else

Emerald Warrior (M, 24, C)

CONCLUSION

This chapter explored how reader responses to the Superhuman and the Transhuman related to some of the central concerns of the Post/Human. It found that respondents largely viewed the superhero genre as a humanist narrative. The superhero's abilities and enhancements were secondary to their humanity. The humanity of the superhero was also related to their morality. While superhero comics were not, as discussed in previous chapters, paired consciously with Transhumanism, readers never found narratives in which the Superhuman struggles with the moral responsibilities of their enhancements/abilities preferable. The question of morality was a matter of intelligence for respondents, and intelligence was prized as a both a personal trait and as a quality in superheroes. This emphasis on mind over matter, in life and in comic books, also connected with the way respondents expressed more interest and sympathy for cognitive enhancements than corporeal ones.

In this way, the Cartesian dualism between mind and matter that so much Post/Humanism problematizes was clearly in evidence. Never the less, although respondents identified the 'self' with the mind, it was the body, and its accompanying physical and temporal limitations, that gave meaning to being human for many. As such the mind/matter binary was more blurred than at first appeared. Clearer for most respondents was a divide between the natural and the artificial. These findings suggest that the goals of Transhumanism are some way from being adopted by the general public. While few respondents expressed religion objection to technological enhancement, the combination of secular morality, a largely firm distinction between the natural and the artificial, and meaning derived from the body's limitations and mortality, made the idea of human enhancement problematic for most respondents. Tellingly,

the exception to this rule was cognitive enhancements which respondents were largely sympathetic towards in theory and occasionally in practice.

At a more abstract level, the divide between fiction and reality was often more porous. Respondents expressed a shared notion that science fiction become science fact in manner similar to the 'inevitability' of a posthuman future discussed in previous chapter. Readers also related to characters in a manner that had its own emotional reality. This is to say that superheroes were, in some sense, their 'friends'. Nowhere were the blurring of categorical distinctions between fiction and reality more pronounced than for those readers who were drawn to the works of Grant Morrison and, to a lesser extent, Alan Moore. The next chapter considers the relationship between creators, texts and readers as a form of assemblage. In so doing it pulls together the cultural history presented in Section Two and the interview findings of the last three chapters to suggest a Post/Human model of text-reader relations.

CHAPTER 12: TEXT-READER ASSEMBLAGES

INTRODUCTION

The previous three chapters presented answers to the research question “how do readers of superhero comics make sense of the posthuman body?” and addressed readers’ views on the Superhuman, Transhuman and Post/Human in turn. This penultimate chapter develops the notion of the reader-text relationship in Post/Humanist terms as a Deleuzo-Guattarian (1987) ‘assemblage’. An assemblage is any amount ‘things’ or bits of ‘things’ gathered into a single context. A comic book is an assemblage, as is the superhero. Assemblages are capable of bringing about any number of effects, and of containing assemblages within itself and forming new assemblages with readers, libraries, church hall jumble sales, bonfires and so on. Section Two demonstrated how the superhuman bodies of the Golden, Silver and Modern age were assemblages. The Perfect Body of the Golden Age comprised bodybuilding AND eugenics AND Nietzsche AND Darwin AND new printing technologies AND Fascism AND readers AND so on.

Section One described how theories of audience-text relations frequently hinged on a binary opposition between audience and text. Later authors argued that this model’s dichotomy was simplistic and that the comics industry, for example, should instead be seen as engaging in a dialogic encounter with readers. Brown suggests that this is a sympathetic relationship rather than “a struggle for power and meaning” (1997:21). For Barker there is a ‘symbiotic relationship’ between producers of formulaic narratives (such as superhero comics) and their consumers:

A symbiote is an organism which lives in a relationship of mutual dependence with another. Although it is possible to study it separately, any full account of its structure and its behaviour depends upon studying it as an organism-in-relation. (1989:129)

This thesis suggested proposed that Barker’s organic metaphor of the symbiote could be reframed in Deleuze and Guattari’s (1987) terms as an assemblage. While the metaphor of the symbiote presents producer and consumer as a mostly harmonious whole, when considered as assemblage the relationship between these two parts is itself constantly forming new

assemblages: reader AND text AND creator AND history AND science AND so on. This chapter would like to go some way to articulating this concept through the data presented.

As such, it is worth briefly reiterating our terms here. Deleuze and Guattari understand the making of bodies, "...to occur on a 'plane of immanence' in which things-objects, beings- are understood not in terms of eternal and immutable essences, but in terms of relations and effects" (Braun, 2004:8). Motivated by positive desire, human bodies have affected their environment through the creation of tools and technologies, organizations and institutions, and symbolic representations; all of which establish myriad new relations with other bodies. For Deleuze and Guattari bodies are 'assemblages' whose, "...function or potential or 'meaning' becomes entirely dependent on which other bodies or machines it forms an assemblage with" (Malins, 2004; 85). Deleuze and Guattari utilize the concept of the 'Body without Organs' (rather than the organism known to medical science; the body-with-organs) to suggest the limits of what a body can do. The Body without Organs seeks to establish such new relations because the more relations a body has the more it becomes capable of doing. These relations can be both physical-with the biological realm -but also non-physical, deriving from a body's psychology, cultural context, or the social world. These relations affect the body and how the body can affect other bodies.

It is important to remember that each component of the assemblage is itself an assemblage. In the case of the reading assemblage above the comic book must also be understood as machinic-assemblages. As Deleuze and Guattari themselves put it, "...the only question is which other machine the literary machine can be plugged into in order to work" (Deleuze and Guattari, 1987:3-4). Rejecting the idea of the book as a representation of reality, Deleuze presents the book as a machine, as something which does things rather than signify things, an assemblage that, "...connect[s] bodies up with other bodies, affects, and social formations in many different directions" (Malins, 2004:95). Viewed as assemblages texts are a mix of discrete parts capable of producing any number of effects, as opposed to the organized, coherent whole that produces a single dominant reading.

The concept of assemblages has implications for the kinds of analyses of readers and texts surveyed in Chapter Three. Because those readings viewed both readers and texts not as

assemblages but as discrete, separate entities many of their conclusions rested on binary divisions: between readers/texts or producers/consumers. Similarly, the ideological analysis of the Superhuman tended to fall into a legitimation/criticism dichotomy (superheroes are progressive/superheroes and fascistic), while the relationship and susceptibility of readers to these legitimate/critical ideologies was perceived as a matter of passivity/activity.

In a related context Woo points out that, “while ‘activity’ may be entirely individualized, practices are inescapably collective. Even when pursued alone, they depend on a dense, multiply articulated assemblage of know-how, beliefs, and material resources; they are social through and through.” (Woo, 2012:183). As such, like the Deleuzian body, “goods – including cultural commodities and media texts – are not truly ‘themselves’ until they are put to use within some social practice” (ibid: 184). Woo thus calls for reconceptualising “media studies’ traditional objects of analysis (producers, media, and audiences) in terms of human beings’ entanglement with social practices (production practices, mediating practices, and audience practices)” (ibid), pulling the study of media closer to social-scientific frameworks. This chapter offers Deleuze and Guattari’s concept of the assemblage as a step in this direction.

The findings presented by this thesis strongly suggest that such dichotomous thinking is limited in its ability to conceptualise and theorise comic books and their readers. This chapter begins by highlighting some of these limitations before presenting evidence for the ways in which reader-texts relations might be reconfigured in terms of assemblages, positioning the body in a relational field quite different from the discursively passive body that is inscribed by environment and social context, or a subjectivity that is textually determined.

CONCEPTUALISING READERS

Bratich has argued that, “...the field of audience studies goes on because its objective is a fugitive” (2005:242), which is to say that the notion that ‘the audience’ is a discursive construction (ibid). This remains the case when considering comic book fans. Comic book readership cannot be understood as a monolithic whole. For instance, Pustz’s (1999) study of comic book culture makes the distinction between ‘fan boys’ and ‘true believers’. That is, fans of mainstream (generally superhero) comics and fans of alternative comics. Even beyond this

aesthetic 'divide' it is possible to distinguish, as Woo (2012) does, between types of collector which he dubs "*completists, hobbyists, and speculators*". Gabilliet (2010: 256) also highlights the fact that while many fans are collectors, not all collectors are necessarily fans.

The respondents who took part in this study demonstrated this multiplicity of practices. In an interesting development, especially given the Post/Humanist concerns of this thesis, new Information Technologies were seen to impact upon comics' fandom. Some collectors used special software to catalogue their collections of individual issues. While some had eschewed hard-copies altogether as in this exchange with Dutch (M, O, 32):

Dutch: *People have started reading them on their phones.*

Interviewer: *What at work?*

Dutch: *Yeah. Because you get free ones on this Comixology app and you can download the first issue of shitloads of comics and you can buy them for, and they're between 80p and 3 pounds, for a new one. Yeah. People have started reading them, but how often I don't know.*

Interviewer: *Why is that then? Because you work there and word spread or?*

Dutch: *Yeah. I told a couple of people about it. Yes. It's really good because you don't have to, well they're free for a start and you can just read them wherever you want. So when you are in the toilet at work or on the bus or whatever. You don't have to carry comics around; your phone is always in your pocket.*

Red Hulk (M, 20, C) also preferred digital formats, saying that he had:

No collection really. I tend just to recycle most of them. I scan the comics for my own use later so I often don't have much use for the paper copy

Even among the majority of respondents who preferred the material form of the comic book there were clear preferences between reading single issues or reading them in collected form as trade paperbacks. Although Woo (2012:196) doesn't invoke assemblage theory directly he notes that, "...with the examples of 'slabbed' collectors' comics and graphic novel / trade paperback reprints", not to mention the digital platforms cited above, "even the comic book itself is not a stable object, as it is transformed by its enrolment in the practices of comics fans". The following quotes illustrate both of these preferential difference:

No I can't, its too, to be honest I don't really like the individual issues in terms of like, as a tactile thing, I don't like the paper, I'd much prefer the paper in you know, for example like my Sandmans which are leather bound kind of books. I much prefer something like that.

Rogue (FM, 27, C)

I don't know, it's the feel of it as well. You're actually holding the comic in your hand; it's got old adverts in it. You've got letter columns and stuff. I really like reading the letter columns. You don't get those in trades

Ergon Cube (M, 32, C)

Beyond the question of materiality of the object, Ergon Cube's statement also highlights how the meaning and practice of fandom differed from respondent to respondents and how not all fans engage in the same levels of fan *activity* (Gabilliet, 2010). Ergon Cube saw himself as being part of a broader comic community through reading the letters pages of comic books although he was not actively part of one. In fact, this was not uncommon among the respondents, as in the following quote:

I'm not that clued in to the comics' world if that makes sense. So if Alan Moore's going to be working on a new Spider-Man I won't know about it until six months after it happens and I'll just be browsing one day and be like, wow! I had no idea that happened. I guess it's because I don't really know anyone else who reads comics. So it's just something I enjoy doing but I don't get a chance to talk about it so I don't get any extra pieces of information.

Logogram (M, 30, C)

The writing and publishing of letters in comic books has been described as, “a process of community formation” (Gordon, 2012:121). As shown in Chapter Three the letter columns of EC and Marvel Comics in particular were central to the formation of the fan cultures surrounding them. In some sense these letter columns prefigure the online ‘virtual’ communities of today. Several respondents pointed to blogs such as *iFanboy* and *Newsarama* (Danger Man, M, 28, C), web series like *A Comic Book Orange* (Slothor, FM, 27, C) and online message boards like Warren Ellis’s *Whitechapel* and the now defunct mailing-list for Grant Morrison’s *The Invisibles* (Logogram, M, 30, C) as places where they could either discuss or hear about comic books and related news.

Other respondents were involved in ‘actual’ networks, as in the two quotes below:

I seem to be at the top of it which is really bad because I’m crap but a lot of the friends I have that read comics have the same problem I have which is, we’re out in the sticks so, we borrow a lot from each other.

Slothor (FM, 27, C)

Well this is what I've got here. The thing about it is that a lot, kind of, I've got Tim next door. He's got a lot of graphic novels so I borrow from him. My friends, because they are kind of expensive and we are all skint, it's more a kind of, everybody reads everybody else's collection, so I've got my friends as well as obviously going to the library quite regularly

Rogue (FM, 27, C)

SUPERHERO AS BODY GENRE AND READING-ASSEMBLAGES

Chapter Eleven demonstrated that for many of the readers who took part in this study, the human aspect of the superhuman played a central role in their enjoyment of these narratives and allowed an emotional connection to the characters. Indeed, there is a soap-operatic element to superhero narratives that was recognized by many:

I think it's very much, its melodrama and its soap opera but the point about it is you've got to start with a real emotional base and then just sky-rocket with it. And that's why I think something like X-Men works really well.

Rogue (FM, 27, C)

Wrestling is soap opera for men. In the same sort of way you've got your superhero comics which are a different form of soap opera.

The Flash (M, 32, C)

For Williams (1991) the film genres of melodrama, horror and pornography can be considered “body genres” in that they focus on the corporeal: tears, blood, semen. This thesis has argued that superhero comics may similarly be considered a body genre. The soap opera elements of the genre certainly align it with melodrama, while the bodily transformations and wide variety of mutants and monsters display a clear and acknowledged link to the horror genre. There are perhaps even arguments to be made about the erotic potentials of the superhuman body, though this was not evidenced in the research undertaken here. Williams argues that it is not just a focus on bodily concerns at the level of narrative that defines a ‘body genre’ but also its desired effect on the body of the viewer. Pornography’s desired effect is obvious. Horror seeks to induce a state of tension, sweating palms, hair prickling at the back of the neck. Melodrama to induce tears (hence the oddly violent term “tear jerkers”).

In such instances, where the experience of “strong sensations of anxiety, suspense, dread, fascination and excitement across the body of the viewer”, it becomes:

Difficult to know where the film ends and the viewing body begins. While the film and viewer do not become one body, they are nonetheless connected through an affective field forming a kind of cinematic assemblage (Rizzo, 2004:336)

The reader responses cited above suggest a similar formation of an affective field we might call a comic book assemblage, or, more broadly, a reading assemblage. Respondents were aware of this process even if they did not use Deleuzian terms:

Certainly for me, you can sit and play a computer game or something and it doesn't you know, that's the whole beauty of it, you are there. Or if you're watching a movie or reading a book you're not aware of your physical shell sitting there doing whatever you're actually doing. Your mind is actually within that thing.

The Invalid (M, 37, R)

I consider it part of my identity so yeah there is, it's part of who I am, I don't know how large a part I'd necessarily say it is. Probably a significant chunk, I wouldn't say the majority or anything but it's, it's part of me.

Green Lantern (M, 25, C)

Peter Parker's probably affected my character in some ways. I'd say, I know he's not a superhero but Doctor Who and Peter Parker are probably where I kind of got my characteristics from or I've liked things about them and they've helped shape me.

Emerald Warrior (M, 24, C)

These quotes illustrate how the reading-assemblage is a verb rather than a noun. Readers became one with their comics, their minds were within the text while the text was also a within-'a part of'-the reader.

When such an assemblage allows desire to flow in *different* directions it produces, "...new possibilities and potentials...brief lines of movement away from organization and stratification" (Maslin, 2004:88). Sometimes these assemblages allow such a deterritorialisation to occur, as in these instances:

It's like any book. Fiction influences your life and your worldview all the time... [The comic-book] Day-tripper really affected the way I thought about life and its value and how significant little moments are

Slothor (FM, 29, C)

I like...the idea of being able to experience other things and different bodies; to see out of different eyes. As someone who reads stories, and all a story ever is is seeing out of someone else's eyes

Rogue (FM, 27, C)

Or, in our terminology, forming an assemblage with the story in order to become other. As Joe 90 (M, 45, O) said, speaking about reading science-fiction generally, it was “*about the speculation I think. And the ideas, different ideas about reality.*” Such deterritorialisations can be emotional as well as intellectual:

I like the Return of Superman because it just had such a good storyline. And I felt such a positive feeling through reading it like, yeah, he's back...[Another] one would be homecoming with the last issue of Kyle Rayners green lantern...because of the emotional resonances this had for me at the time I just always thought it's one of my favourite stories.

Danger Man (M, 28, C)

In a different register Maigret describes how some stories allowed readers to analyse their own experiences and memories, citing a reader who was prompted by an issue of Daredevil dealing with drugs to, “...express his emotions after his cousin had died of an overdose” (Maigret, 1999:14). Such examples speak to the positive aspects of the assemblage in allowing new becomings; in Maigret's example, a release of emotional tension.

THE BRITISH INVASION

Reading-assemblages also formed assemblages with (and within) their country of origin. The meaning of superheroes for many readers in this study was shaped by geography and historical trends, many of which respondents were aware of. In fact a sense of national pride was sometimes expressed in what has become known as the British Invasion (Gabilliet, 2010, Lopes, 2009), when DC began wooing UK creators such as Alan Moore, Neil Gaiman and Grant Morrison to come and revive flagging characters such as Swamp Thing, Black Orchid or Animal Man respectively. Alongside the American writer-artist Frank Miller's work on Daredevil and

Batman the collective corpus of this new breed of writer served to briefly legitimate comic books in the media as having 'grown up' with their "new" complexity of narrative and psychological realism. That a further assemblage was formed with the film industry resulting in Tim Burton's well-received 1989 Batman film (back when such films were still rare) served to further strengthen a burgeoning mainstream interest. This is a necessarily brief history of course. What is important is how readers were aware of these events.

Asked which comics they felt were most influential in the development of the superhero comic most interviewees, especially committed and regular ones, were able to offer a canon of works and hierarchy of creators that erred heavily on the side of British creators such as Moore, Morrison, Gaiman, Mark Millar and Warren Ellis. Meanwhile the most frequently cited texts were from these creators. Indeed, such was the pull of the auteur that most respondents would follow a particular creator rather than a particular character.

I don't have a character that I associate that strongly with. There's no character that I'm going to buy whoever's writing it. When Grant Morrison stops writing Batman I'll jump off. I already did. I stopped buying Batman and Robin the day he stopped writing it. I didn't buy any of the spin-offs of final crisis that he didn't write unless I thought it was someone good who was writing it anyway. I just, I'm not that attached to them. They are just vehicles as far as I'm concerned.

Vesuvian Man (M, 36, C)

Unsurprisingly, Moore and Gibbons *Watchmen* was frequently cited as an exemplary examination of the superhero:

I love Alan Moore's stuff and it tends - I think Watchmen is pretty much everything you need to know about superheroes right there. You might as well just read that and not read anything else. Like if you were going to read one thing and never read anything else that's what you'd read.

Rogue (FM, 27, C)

Alan Moore just generally gets to me I think he's a fantastic writer. Watchmen as well, when I read it, it was the first time I'd thought about just how flawed the notion of the superhero is and how it's very nice to think of your spandexy hero who will come and save you but ultimately, why are they getting all dressed up?

Slothor (FM, 29, C)

Indeed Moore's reputation was such that of all the writers cited he was the only one known to occasional readers such as Ozymandias (M, 26, O) below:

INTERVIEWER: *And what other Alan Moore stuff have you read?*

OZYMANDIAS: *His Killing Joke and Watchmen. And I'm reading his novel just now but that's got nothing to do with superheroes.*

INTERVIEWER: *What's the appeal of Alan Moore then?*

OZYMANDIAS: *I think it's the psychological element. Like with other superheroes he goes into why superheroes are a bit mental. Why you have to be a bit mental to do what they do. Like the Killing Joke is about how Batman and the Joker are sort of the same.*

This discussion highlights a more general admiration for the way many of the British creators 'deconstructed' the superhero:

Yeah, there is a difference. I'm just trying to think which American writers kind of push the envelope. There's none really. I mean mainly all the, nah, most of the comics in my collection are from British writers so it must be consciously or otherwise I'm drawn to the way they write.... they are looking at it a bit more, yeah, critically I guess. The American writers tend to be a lot more gung ho. The Todd McFarlane kind of that sort of Frank Miller latterly, or even when he did Dark Knight Returns actually. Yeah, yeah, it's more a sense of humour and a sense of distance is a good word for it. They are kind of looking at it through a different lens. The superheroes are all American really aren't they?

Ergon Cube (M, 34, C)

It's then interesting to say okay, then all these British writers start coming over in the 70s and 80s and they start using superheroes in a very different way. Perhaps that's why because you know, um, you've got, the idea of the superhero developed in a strong confident and militaristic society but then that idea being taken and reappropriated by a country in the depths of financial depression and really struggling with self-identity at that point. And also tinged by Cold War sorts of fears. They then take that idea and turn it on its head or at least, you know, explore it from a different angle is an interesting one.

Vesuvian Man (M, 36, C)

Considering the posthuman body as a rhizome made of overlapping discursive plateaus it is once again interesting to note how the respondents' praise for the British deconstruction of the superhero broadly mirrors the current differences in approach to Transhuman enhancement in US and EU policy recommendation where the US approach is *proactionary* and the EU approach *precautionary* (Fuller, 2009:7). Of course, it is possible to argue that the respondent's praise of these texts remains merely a matter of literary merit as they were largely established fixtures of the comic book canon. Never the less there remained a sense of propriety that many of the UK respondents in this study displayed. For instance, while it is well known that these creators earliest work was done for the British anthology comic *2000 AD*, for many readers this was not an impersonal historical fact but a crucial part of their formative comic book experience as seen here:

Earliest would be, it was faintly stuff like Whizzer and Chips and Whoopee, the real kid's stuff. Not really Beano and Dandy, they were more sort of Christmas gifts or something like that from people who knew that I liked that. It wasn't until 2000AD that it really, "now this is much more what I'm talking about"! You know? I actually remember the very first edition ever coming out and that led to collecting and having a pile of 2000AD.

Durinsbeuk (M, 42, C)

My first memories of comics was probably when I was 11 in 1977 when 2000AD started.

Joe 90 (M, 45, O)

My first experiences with actual comics were 2000ADs and it was always that we would, the local paper shop would just have one or two from this 6 month period so I'd just get these tiny snapshots of stories and so they always seemed like these massive epic things that I could never get the whole lot and because of that it was always tantalising. I wanted more and I wanted to experience all the gaps that I couldn't get up there. So I think that's what drew me into comics and that's what made it so enjoyable for me when I was younger.

Logogram (M, 30, C)

American comics publishers did not just poach creators from British comics but also, to some extent, their readers. Several respondents articulated a similar progression from 2000 AD to superheroes.

I came into superheroes the other way round. I started off reading 2000AD when I was a kid. And that led into, it happened to be at a time when I was a teenager when there was that big explosion of British monthly comics like Deadline and Revolver and Crisis. So I used to get those every month and that led me to mature readers comics and you know there was a DC jumped on the bandwagon and had one that reprinted stuff from vertigo. So that was the first, you know the first superhero book I ever read probably was like Black Orchid, the Neil Gaiman one. I think that had Dark Knight, Year One or something like that in it. So that was the first time I ever got interested in superheroes.

Vesuvian Man (M, 36, C)

As the research presented herein was conducted in Scotland it is worth noting a certain amount of national pride on the part of several respondents. Comic books are unique in the porous boundary between fan and creator, as made particularly clear in the following extract:

We have a big comic book community. We've got Quitely here, we've got Millar here, we've got Morrison here, who all still live in Glasgow and you know, if you go and knock on Quitely's door on a Wednesday he'll often let you in and have a cup of tea with you. So you know they are all very welcoming.

Emerald Warrior (M, 24, C)

Emerald Warrior's account offers a clear example of how the industry itself can be considered part of the same rhizome as the texts it produces. Craft reminds us that although these comics universe are produced by corporate interests it is never the less, "...overly reductive to think of the corporation as a unitary agent, or to think that its power is absolute" (Craft, 2004:138). In fact, they must respond to, "...coherent and vehement reader communities, which can coalesce around Internet communications and publishing technologies to organize those desires and to make them known". Moreover, "...many of these fan communities 'infiltrate' the corporation, inasmuch as their members become creators after considerable time spent as consumers, or as fans...Corporate creativity, individual creativity, and consumer response are therefore porous, intertwined and interdependent categories" (ibid.). This interdependence extends even to the mix of styles in comic books, as Jenkins argues, "in no other medium is the line between experimental and commercial work this permeable" (Jenkins, 2009:26). And in no other medium is the line between producer and consumer so permeable, even symbiotic (Barker, 1989).

IDENTITY FORMATION: BECOMING-GEEK

If a particular assemblage is repeated too often through habit the components of that assemblage can become stratified and coded (Malins, 2004). A reterritorialisation occurs. The process of building an identity as a comics reader is a good example of this. Several respondents were happy to identify as a 'geek', for example Slothor's (FM, 29, C) touching admission that, "*it's quite nice having a geek husband and a geek wife*" because they could read each other's comics. What it means to be a geek was rarely defined explicitly but was not simply a matter of reading comic books. As Midi (M, 30, R) put it, up until recently, "*I wasn't a comic book reader but I was still a fairly geeky guy*". Rather, it appeared to depend on a fondness for a variety of mediums (such as video games in Midi's case) and genres that shared the cultural illegitimacy of comic books:

Interviewer: *And what about um, I suppose before comics, did you have other, I don't want to use the word geek necessarily-*

Green Lantern: *I know what you mean though, I don't know but as you can see over*

there here's a rather substantial collection of Dr Who DVDs. Those are actually, most of those I've bought fairly recently but I've got, I've pretty much got the entire run of star trek the next generation, the original series and DS9, which was a big thing for me. A ton of Star Wars books which I was reading before I got into comics. So yeah, I was, a bit of a science fiction fan. More science fiction than fantasy but that kind of thing.

The geek assemblage formed by reader and medium provided a sort of deterritorialisation, allowing either escape or entertainment. This pleasure often lay in the accumulation of knowledge about the medium, a point observed in Pustz's (1999) study of comic book culture. The Flash (M, 33, C) called himself up on his knowledge of obscure comic book lore for instance:

If you get Ghost Rider and suddenly it turns out that Zarathos is Johnny Blaze's dad and that's how he can possess him because they share a bloodline, who gives a fuck? Seriously, who gives a fuck? Are you going to go up to someone and say did you know this about Zarathos? And they'll go, " I don't know who Zarathos is. I don't even know who Ghost Rider is!" That's how geeky I am. You're struggling with Zarathos.

In several respects, fans are essential to continuity structure. As Wolk points out, the Marvel and DC Universes have grown so complex that they have led to what he calls "superhero meta-comics" aimed at, "...'super readers': readers familiar enough with enormous numbers of old comics that they'll understand what's really being discussed in the story" (2007, 105). Nor is this just one continuity. Jenkins suggests that contemporary comic readers have become accustomed to holding multiple universes in their heads (2009:20) while Collins (1991) has argued that this breeds a form of 'hyper-consciousness' (an appropriately comic book like term). The reader, in effect, "...is an integral part of the superhero genre...embedded in the hypertimelines of a superhero story", and actively participating, "in a game-like conversation that's about the construction of the rules of the superhero genre across media: its various points of origin, its points of divergence, and its radical transformations (Ndalianis, 2009:284-285)". In short, it is the readers memories that serve, "...as a databank of complex, interconnected, and retrievable chunks of information" (2009:282) that comprise comic book continuity. Once again, the reader and text form an assemblage, from which continuity emerges.

Nevertheless the respondents in this study identified a negative side to geek culture, in particular the emphasis on continuity. This negative vision is perhaps a good example of what happens when the geek assemblage is repeated too often so that the components of that assemblage become stratified and reterritorialised. These geeks were said to overemphasize obscure points of continuity and the collecting of comics and accompanying merchandise. For most respondents however, the pleasure of the story took precedence over these issues. In this sense the desire of “bad geeks” to keep continuity in place represents a blockage in the flows of desire the comic book assemblage can facilitate. For this reason when The Flash describes how his life as a comics-reading assemblage has changed for the better even though he has destratified the geek assemblage to allow new assemblages to be formed:

The Flash: I was a geeky teenager with excessive amount of time on my hands. Now I'm a geeky adult with additional responsibilities and other commitments who can't afford the time to commit but I'm still that geeky-

Interviewer: But that doesn't seem like a sad event? Something to commiserate?

The Flash: No. I think that's human nature. I would say it's the other way round. If I was still, if I was that 32 year old who was still a geeky teenager then that implies there's something not quite right I think. Each to their own and all that but I'm glad I'm not living in my mother's basement. I'm glad I can talk to girls. I'm glad I can look you in the eye when I speak to you.

Interviewer: Do you think there's a perception of people who read comics as that sort of living in your mother's basement-?

The Flash: Yeah, of course. And unfortunately I think it's quite fair and quite apt. It's a stereotype, but it's a stereotype because it exists.

TATTOOING AS HUMAN ENHANCEMENT

Often the comic reading-assemblage produced real material effects upon the bodies of readers. While it has been shown that most of the respondents were loath to enhance themselves with technology, several had tattoos. The Flash for example sported the window of Dr. Strange's Sanctum Sanctorum on his left rear shoulder, a Ghost Rider medallion on his right shoulder, and the Spawn symbol on his left pectoral and a Spider-Man icon on his left thigh among others. Ergon Cube had Batman and the puzzle box from the horror movie Hellraiser while Slothor wore a goblin form the graphic novel Serenity Rose. In this sense the reading-assemblage truly had resulted in a movement towards a disarticulated body, transforming skin into canvass. This is particularly interesting if we accept the notion that the contemporary trend for tattoos and piercing marks "the vanguard of social-corporeal transgression" (Brown et al. 2010), in other words the first steps towards human enhancement. While the majority of respondents did not embrace the idea of human enhancement for its own sake - comparing it to cosmetic surgery - the various tattoos sported several of these respondents suggested at least some inclination towards enhancement. As Slothor (FM, 29, C) wondered:

Could you not say that tattooing is cosmetic? But I like tattoos. I like them as an art form. And I think that's the main reason why I get them. But I don't think the change the fundamentals of things. Right now you can't tell what tattoos I have.

Also notable in this respect is Slothor's admission that "*I had [the X-Men character] Rogue's hair for most of my teenage years because I thought it was immense. Interesting colours*". Such a process can work both ways. While the comic book superhuman could be allowed to territorialise the body, some bodies could reterritorialise. Emerald Warrior (M, 24, C) professed a desire for tattoos but his bodily assemblage had a condition called keloids which prevented this because his skin over-healed. Never the less, he was still able to poach from comics to make sense of this, although he still admitted that, "*the coolness of saying you've got a Wolverine-like power does not really, it doesn't stay when, you know, you're wanting to rip your skin off kind of thing*". These examples are quite general but point to the material expressions of the reading-assemblage.

BECOMING-POSTHUMAN

At this juncture it becomes possible to consider in what ways the specific posthuman bodies presented in this thesis were/are able to facilitate/prevent new becomings when they from a reading-assemblage with readers. For instance, it is likely that many early comics readers would have followed the regime for 'becoming-Perfect' laid out by Charles Atlas. The reading-assemblage formed with the Perfect Body of the Golden Age Superhuman also seemed to facilitate a 'becoming-patriotic' (consider the hundreds of thousands of copies of Captain America shipped to US troops each month). That the comics-reading assemblage could strengthen the will in such ways is of course one criticism that has been levelled at the superhero, but respondents were able to offer examples of this that were viewed as largely positive:

I'd hope that I'd do the kind of thing that Green Lantern does where he doesn't give up and uses his will come what may. I try and do, I try and put my willpower to the test. This is going to sound really geeky, I try and live without fear. Green Lantern is almost like a bible to me in that you should just try and do it, whatever. Forget the consequences, just go gung-ho into it. So yes, they have affected my life and shaped who I am.

Emerald warrior (M, 24, C)

I was hit by a lorry when I was 12. I still consider myself to have a normal body it's just one that's slightly damaged. But when I was 16 I dropped out of college. I made myself go round, I made myself get better. Most of my physical damage was something I could overcome with work. My head was bit messed up so I made myself go out, learn jobs, travel round, pay for myself to travel the world, to get myself a better stronger rounded individual. I jokingly started calling the Batman method later but I like the fact that superheroes will try to work to overcome their problems and try and make something positive out of them.

Danger Man (M, 28, C)

Readers forming an assemblage with the Military-Industrial Body were also subject to new becomings. While these comics generally presented a darker picture of posthumanity than the Cosmic Body they served a function similar to that which Barker suggested 2000 AD served for its fans (although this is hardly surprising given their shared creators):

For those who did take the comic seriously, and allow it to cross over into other parts of their thinking, a paradox emerged. The very pessimism and bleakness of the comic constituted it as a source of hope for the future (Barker and Brooks, 1998:15).

Warren Ellis, who as Chapter Eight discussed has become something like a poet laureate of the Military-Industrial body, was particularly praised by respondents for his handling of posthumanism in the non-superhero comic Transmetropolitan, but also for his approach to the same issues in his superhero work such as the Iron Man story Extremis. Such was Ellis's standing in dealing with these issues that the study's only explicit Transhumanist, Eye-Borg, an occasional reader who felt that most superhero comics dealt poorly with posthumanism, praised Ellis's comic Orbiter:

That's something he's written to, you know, compare much more about technology but about the human race, what our goals are. What do we want to achieve? What do want to become? Whereas Transmetropolitan is all about how fucked up we are. (laughs)

It ought to be highlighted that the assemblage formed by reader and Military-Industrial body is hardly new. Between 1969 and 1971 the letters pages of Captain America featured

Extended debates occurred between readers discussing the meaning of patriotism and anti-war protests, the morality of political apathy, the role of violence in conflict resolution, nationalism versus global community, and the Vietnam War...several argues that he needed to be fighting in Vietnam. Others argued that he was an agent of the establishment and needed to be shown rethinking his position (Costello, 2009:90)

While in the letters pages of Iron Man one reader

Warned that as a munitions manufacturer, Iron Man was "going to have to do some pretty big restructuring of his life to avoid being classified as an enemy of the people. One reader simply condemned the superhero as a "profiteering, capitalist, war-mongering pig"...published letters from liberals far outnumbered those from conservatives, who complained that the series had already moved too far to the left (Wright, 2001:241)

For readers forming an assemblage with the Military-Industrial Body such stories played into their thinking about the ethics and political implications of the posthuman. This cynicism towards the superhuman, or at least the simplistic superhuman of the Perfect Body, need not be seen as simply a matter of personal taste but rather culturally contingent. If British comics and creators have a long history of deconstructing the figure of the superhuman and revealing the potential fascism and abuse of power within it, such a view also informs readers approaches towards enhancement, as has been shown previously. This critical distance is reflected in the European and American approaches to human enhancement too. As shown in Chapter Seven the European response to U.S. National science Foundation's report *Converging technologies for Improving Human Performance* (Bainbridge and Roco, 2002) was to produce its own report (Nordmann, 2004) containing, as Johnson and Youngman (2011:255) succinctly put it, "...less trans-humanism and more humanism".

Of course, the Superhuman is not a totality in which the components are fixed, but an assemblage whose components can play different roles in diverse assemblages. This is clearly illustrated in the becomings that are facilitated by the reading assemblage formed with the Cosmic Body. For readers who were interested in such matters there was a clear link between the various occult and mystical philosophies and comic books that were highlighted in Chapter Eight:

I mean you can trace the connections of the writers involved in the golden dawn and the number of comic book writers that have got some sort of link to magical groups and out through Kenneth Anger things like that. Crowley on the cover of Sergeant Pepper and that feeds into the hippies with their new coming Aeon and transformation of human consciousness. It's a major thread in the Twentieth Century.

Vesuvian Man(M, 36, C)

The comic book Superhuman also served as a metaphor for understanding Eastern spiritualities and practices:

See, well the Green Lantern thing, and with Buddhism and yoga, yoga in particular, Green Lantern is a very yogic character. It sounds strange but yoga is all about not being afraid, and yoga is all about using your willpower to beat what your mind thinks you cannot do. And as I say I started reading Rebirth just as I was getting into yoga and everything so these characters really related to what I was getting into and how I was looking at myself, how I saw myself. Especially when they brought in like the Blue Lanterns and, like, the Saint Walker, basically as I said, Buddhists. I think Green Lantern, I think that's why Green Lantern is so important to me in that aspect because they are, he is very much like that. If you look at what you do in yoga and look at the opinions in Buddhism, as I said there is a hell of a lot of, you know, overlap, probably similar to the way in which there's a lot of overlap in the way that Superman is just a god, you know? There's that kind of overlap. So yes, there is an overlap with my Buddhist beliefs and my love of Green Lantern.

Emerald Warrior (M, 24, C)

The countercultural poaching of superhero imagery discussed in Chapter Eight indicated that Cosmic Body-assemblages have some historical precedent, as in this unpublished 1970s letter to Marvel Comics describing an assemblage consisting of a reader AND marijuana AND music AND comic book:

I like to smoke a bowl, put on ELO or Pink Floyd and read the latest issue of Doctor Strange (quoted in Howe, 2012).

In fact this thesis found that the Cosmic Body continues to form new assemblages with contemporary readers, particularly through the work of Grant Morrison. Having already noted a predilection towards mind over matter in reader's responses it is not surprising to find that certain readers expressed sympathy to the notion of a posthuman consciousness. In the case of Morrison's most devoted fans the reader-text assemblage often forms new assemblages with other "people, substances, knowledge, institutions". Morrison's particular brand of Cosmic Body had inspired readers to engage in various forms of praxis, including magical rituals and the use of psychedelic drugs; the effects of which were described in terms not unlike the philosophical aims of Post/Humanism:

What it did for me was relativize the world, the everyday world. So after a couple of trips you know how reliant on your own perceptual filters the world is as you see it
Vesuvian Man (M, 26, C)

As well as an opening up to new ways of being:

It makes you realise that there's a lot more possibilities and stuff. Like space and aliens. Space is big, and you know it but you don't necessarily see it. Then you go, "whoa! Space is massive!" yeah. It fills you with the idea of possibilities.
Dutch (M, 32, R)

Sometimes the new assemblages simply involved following up on the references to other countercultural writers and ideas found in Morrison's work. This is in keeping with the suggestions put forward by Faust (2011) that Morrison's work intends to provide a kind of shamanic experience for his readers, accomplished largely because of the strong connections between the reader and text. Bavkla (2011) too, has argued that Morrison's comics are participatory events for readers.

I do not want to give the impression that this was a univocal process. Often readers had come to Morrison's work with prior experience of magic, drugs or countercultural thought. Even so, in forming assemblages with these practices, substances and books beforehand readers 'flows of desire' were redirected towards Morrison, not to mention forwards, backwards and elsewhere from there. In the case of Grant Morrison both praise and criticism usually centred on the same issues. Here, for example, is a negative criticism:

He seems to have stopped being interested in telling us a story and become more interested in showing us how clever he is at telling a story. I mean, Final Crisis was gibberish as far as I'm concerned and his cop-out that it's, oh, "the movement of gods, you shouldn't understand it". Fuck off. That's not what I paid you for Grant.
Arkham (M, 43, C)

And here a positive;

Just the, yeah, the toying with reality and what you perceive to be real and what could also be happening at the same time in the same place but in a different multiverse. Yeah, it's just, like there's a higher perception of consciousness or reality and he plays with that more

Ergon Cube (M, 34, C)

In Morrison's work form and content are married. What Arkham experienced as 'gibberish' is experienced by Ergon Cube as a 'higher perception of consciousnesses. Although not a superhero comic proper, Morrison's creator-owned work *The Invisibles* (published by DC's Vertigo imprint) was regularly cited as an important text in this regard:

Invisibles of course is a narrative about a group of people attempting to elevate human consciousness to bring on evolution

Vesuvian Man (M, 36, C)

The data presented in this thesis suggests that there may indeed be some empirical validity to Bavkla and Faust's readings. That explicitly magical writers such as Morrison and Alan Moore figure so prominently in the comic book canon created by readers might also suggest that the cultural value assigned to a text may in part be related to the new becomings that forming a reading-assemblage with such texts allows. Similarly, the disdain expressed by several respondents for the Hard Bodies of the Dark Age of comics may be because such representations appear all too stabilized and, "in that they establish boundaries of identity that restrain temporarily the movement of the flows and the lines of flight" (Rivkin and Ryan, 1998:345) whereas the Cosmic Body can instead provide, either at the level of narrative or embodied practices such as yoga or drug use, "brief lines of movement toward a disarticulated body, toward deterritorialisation" (Malins, 2004:88). Although this process is dependent on the reader that such texts form an assemblage with. In other words, the meaning, function, or identity of the Cosmic Body (or any assemblage) is not fixed but dependent of the relation of forces it interacts with.

CONCLUSION

This chapter introduced the concept of reading-assemblages as a way of overcoming the dualities that have regularly featured in the analysis of texts and/or readers. Although one of my initial research questions asked, ‘what sense do readers make of the posthuman body’ I wanted to avoid answering this in dualistic terms. Instead this chapter demonstrated that because of the inherent limitations in asking what a text means, or what a fans ‘is’ we ought instead to ask what such assemblages can DO. Moving away from questions of being to focus on becoming. The chapter then demonstrated that comic oriented practices went far beyond simply cognitive activities such as interpretation or even embodies practices such as collecting. Instead the forming a reading-assemblage with the superhero comic book allowed respondents to become other. Moreover, such a becoming could inspire readers to experience new becomings, forming new assemblages informed by their previous experiences. This was particularly true of the reading-assemblages formed with the Cosmic Body but not limited to it.

CHAPTER 13: CONCLUSION

INTRODUCTION

This thesis began with two research questions: How have depictions of the posthuman body in superhero comics developed? And, how did readers relate to these depictions of the posthuman body? Research began with the literature reviews as answering these questions involved unpacking some assumptions embedded in the research questions. It was recognised that the figure of the posthuman body was far from fixed and bounded. Instead I derived from the literature a conception of the posthuman body as an assemblage, or rhizome, formed by the overlapping realms of fictional Superhumanism, the techno-scientific practices of Transhumanism and the critical-theoretical philosophy of Post/Humanism. This typology represented the first contribution of this thesis to new knowledge. Connecting each of these realms was the question of technology's potential to transform human bodies.

For the second question it was necessary to consider the figure of the reader, and related ideas about how audiences and texts interacted. I suggested that Deleuze and Guattari's concepts of assemblages and rhizomes could also be applied to the study of texts and audiences. This would involve conceptualising the text itself as an assemblage. As such it could possess no essential meaning. The 'meaning' of a text could only emerge in relation to the assemblage of the reader that the text assemblage formed a rhizome with. Where much of audience research had historically been concerned with an antagonistic relationship between reader and text, later theorists suggested that this relationship was actually potentially sympathetic. The notion of a rhizomatic relationship fitted neatly with this trajectory and presented a currently under-explored scholarly territory.

A CULTURAL HISTORY OF THE POSTHUMAN BODY IN SUPERHERO NARRATIVES

Following the literature, theory and methods presented in Section One, Section Two presented a non-chronological journey through the history of the posthuman body. Using a cultural history approach it showed how the development of the Superhuman was but one discursive realm or assemblage within the rhizome of the posthuman body. This discursive realm formed further

assemblages with the discursive realms of Transhumanism and Post/Humanism. As this thesis nears its end it becomes possible to reformulate the understanding of the posthuman body and restate why we should concern ourselves with it at all. While not necessarily sharing Fukuyama's bio-conservatism, this thesis broadly supports his observation that the conceptualization of the human throughout history has had, and will continue to have, "great political consequences" (2002:120). As this thesis has demonstrated this is also true of the posthuman.

This is not a matter of ideology however. This thesis does not argue that representations of the posthuman body, in whatever discursive realm, mask or obfuscate either a 'true', 'natural' human body. Nor does it argue that there is a single desirable or true form of posthuman body. There is no actual world that is then represented in words and images (the virtual) by the privileged mind of the subject. These images are neither actual nor virtual but the interval that brings actuality out of the virtual. The literature surrounding the posthuman body does not present a copy of the actual world but extends the virtual tendencies of the given world.

To elaborate, the posthuman body was presented in this thesis as, "...an assemblage of socially coded affects" (Colebrook, 2002:93). The desire to become other, to become posthuman, is not singular, hence the different forms that the posthuman body took at specific historical junctures. The body too is an assemblage whose, "...function or potential or 'meaning' becomes entirely dependent on which other bodies or machines it forms an assemblage with" (Malins, 2004; 85). It is not that the Perfect, Cosmic, or Military-Industrial body is the genuine article but each are manifestations of desiring production that have become coded and thus stratified into what Deleuze calls an 'interest'. Interests are not an effect of our desire but a law that governs our desire and is always formed from specific and singular affects. So it was that both the Nazi visions of the Master Race and the comic book superhero were expressions of the same unruly desire to become posthuman but coded as an interest by the specific and singular affects of the time. Because of this scholars have often linked the superhero to fascism based on these shared codes. But the desire to become posthuman is impersonal, no more fascistic than revolutionary. The posthuman body is always coded by the interests that have territorialised it. Never a representation of the actual but an extension of the virtual tendencies of the given world. By highlighting these historically specific codings this thesis hoped to go some way to releasing the impersonality of desire from these interests.

There are obviously political implications to this. The history of the posthuman body demonstrates the material effects that are brought about when the posthuman is coded as an interest. The eugenics movement, the Nazi Holocaust and the dispiriting contemporary emphasis on the search for cyborg super soldiers are testament to this. This is a history that appears difficult to shake.

As this thesis has shown, while the figures of the Perfect, Cosmic and Military-Industrial posthuman bodies are more evident at certain times they are not mutually exclusive categories. While it remains to be seen if the Cosmic Body can regain prominence in the social imaginary it is entirely possible that an entirely new, as yet unimagined discursive formation may appear as the assemblage of the posthuman body connects with new social formations, bodies and affects. Furthermore, there are fascinating depictions of posthuman bodies in superhero comics (Artificial Bodies; Grotesque Bodies; Abject Bodies) that have been left unaddressed by this study but that would require a similarly wide-ranging cultural historic approach to properly understand their historical development and the underground root systems that connect them to other literary, philosophical and techno-scientific realms.

In presenting the posthuman body as rhizome this thesis hoped to avoid an analysis of superheroes that fell into a legitimization/criticism dichotomy. Never the less at this stage it seems possible to make some observations. First of all the frequent criticism of the superhero as a reactionary or fascistic figure is an arboreal analysis rooted in the Perfect Body of the Golden Age and rarely accounting for the metaphysical complexity and countercultural leanings of the Cosmic Body or the social critique that usually accompanies the Military-Industrial Body. Given that before the advent of World War 2 the superhero displayed marked socialist tendencies, "...the relationship of the superhero to the social whole has always been one of alienation of one kind or another" (Peaslee, 2007:50), and even, perhaps especially, the characters who might seem most conservative such as Captain America and Superman, have been seen to, "...cry out on behalf of individuals immersed in technocratic and institutional mechanisms of control" (ibid). In this respect the emergence of the nationalistic Perfect Body appears simply result of the advent of a world war. Rather than the essence of the Superhuman, the Perfect Body was a result of military-industrial concerns territorializing the Superhuman Body. Similarly, the

counterculture assemblage deterritorialised the Superhuman Body during the Silver Age, resulting in the emergence of the Cosmic Body.

The cultural history also highlighted the idea of the posthuman body as an assemblage formed by overlapping discursive realms. As such, the transformations undergone by the Superhuman were echoed and paralleled by similar changes in the realms of Transhumanism and Post/Humanism. The threefold typology of Perfect Body, Cosmic Body and Military-Industrial Body (as with the categorizing of Superhuman, Transhuman and Post/Human) provided an original heuristic for analysing not just the superhero but also the wider discourse of the posthuman body.

READER RESPONSES

The reader responses presented by this thesis provide an original contribution to our shared knowledge of comics and readers. Although there have been a few studies of comics readers, none have focused on the topic of posthuman bodies. The findings herein provide useful indicators for future research in a number of connected areas. To begin with the reader responses highlighted the concept of the superhero comic as assemblage. Just as the meaning and corporeality of the superhero was constantly becoming deterritorialised and reterritorialised, so too did readers territorialise and allow texts to deterritorialise them in turn.

The first important finding in this regard was the respondents' ability to recognize the representation of superhero bodies and technology as iconographic, abstract signifiers of genre rules. In other words, superhero comics were simply not read as representation of the real world, but as representations of themselves. Never the less, respondents enjoyed superhero comics when they were grounded in an emotional reality, responding to the human in the Superhuman. Furthermore, few respondents made a connection between the concerns of superhero narratives and the concerns of Transhumanism.

In fact, the philosophy of Transhumanism was little known, and while respondents showed awareness of certain enhancement technologies they tended to contextualize these in terms of function and the Transhuman desire of enhancement for enhancement's sake was largely

greeted with suspicion. Respondents expressed concern that such technologies might exacerbate already existing social divisions and contribute to a more violent world in the form of super soldiers. Despite these worries however, respondents also viewed a posthuman future as inevitability. This ambivalence towards Transhumanism was also felt in relation the Superhuman. Respondents generally expressed a preference for the approach to superheroes taken by the British Wave of creators, one that deconstructed and troubled the superhero. This critical distance is mirrored in the differences in approach taken by European and American policy papers on Transhuman enhancement.

READER-TEXT ASSEMBLAGES

While respondents often made distinctions between body and mind, or natural and artificial there were some respects in which readers expressed a form of Post/Humanism. This was most clearly evident when discussing the ways in which superhero fictions crossed over into their own lives. Several respondents felt an emotional attachment to these characters or used superheroes to make sense of moral questions or to focus will-power. For other respondents superhero comics allowed them to form networks with other comic readers. With this in mind this thesis suggested the outline of a new way of conceptualizing texts and readers as a forming a rhizomatic assemblage with one another. The formation of this assemblage resulted in new becomings. Some of these becomings resulted in the kinds of semiotic and/or textual productivity (the creation of further assemblages) already noted by audience researchers. Audience 'activity' can thus be reconceptualised as a mode of 'becoming'.

Importantly, the reader-text assemblage could also result in more corporeal becomings. In some sense this goes back to the earliest days of the superhero when unknown readers replied to Charles Atlas famous adverts to attain the Perfect Body of the Golden Age. Similarly, Chapter Seven's discussion of the Military-Industrial body demonstrated that even if the readers who took part in this study made little connection between superheroes and human enhancement technologies, superhero comics have remained an inspiration to military research. These ranged from being inspired and focused to become healthier (as in what Danger Man jokingly referred to as his 'Batman method') to bodies themselves becoming texts, inscribed with tattoos of superhero insignia in the case of the Flash. Perhaps the most 'activity' in this sense was

produced by the assemblages formed with the Cosmic Body. Emerald Warrior fused his embodied practice of meditation with the mythology of Green Lantern, while the comics of Grant Morrison and Alan Moore bled into the magical practices and psychedelic explorations of Logogram, Vesuvian man and Ergon Cube.

SUPERHUMAN, TRANSHUMAN, POST/HUMAN: MAPPING THE DISCOURSE OF THE POSTHUMAN BODY

This thesis has presented two original models for conceptualizing the discourse of the posthuman body. First, that 'posthumanism' is not a stable category but an assemblage. In order to consider this assemblage it was necessary to consider its components and the relations between them. These discursive realms were named Superhumanism, Transhumanism and Post/Humanism. Secondly, I presented three models of the Superhuman body: Perfect, Cosmic, and Military-Industrial. These categories were connected rhizomatically to one another within the assemblage of the posthuman body. As such, any analyses of changes within one component were related to changes in the others.

Despite the seemingly obvious parallels there has not yet been a sustained study of the superhero as posthuman. It is hoped that the cultural history presented by this thesis fulfils this role, while also moving beyond focusing simply on the texts themselves but contextualizing these developments within a wide web of industrial, aesthetic, social, philosophical, historical and economic concerns. In doing so I hope to also contribute to a gap in our collective understanding of the history of the posthuman body in theory and practice.

This thesis also presented readers as part of the assemblage of the posthuman body. In interviewing comic book readers the thesis addresses several gaps in our understanding that are of use in a number of ways. The findings presented here strongly suggest that readers view superhero bodies as a code of the genre (e.g. *this is what a superhero looks like*) rather than representational (e.g. *this is what an ideal male body looks like*). This simple fact is enough to call into question the many studies of ideology and representation in superhero comics that suggest such images have negative effects on readers. The data and theory suggests that not

only is this argument wrong at the level of reader interpretation but also reader activity, or, rather, becomings.

The findings also have implications for how the public might react to Transhuman technologies. Viewing such technologies as 'inevitable' but also in the hands of the military-industrial complex, suggest that people may feel a lack of agency with regards to human enhancement. Despite such concerns it was also evident that cognitive enhancements seem likely to be adopted more quickly than more physically invasive technologies.

Finally, this thesis hopes it has contributed to Post/Humanist theory, not only by way of the cultural history but more fully in Chapter Twelve's discussion of reader-text assemblages. Though that discussion marks an initial suggestion of the form such an approach might take I believe it points in the direction on more work that addresses how reader's bodies connect up with texts and the new becomings that this assemblage gives rise to. Such an approach also highlights the multiplicity of forms and practices that readers take and engage in.

While any thesis is above all a scholarly endeavour, this thesis had demonstrated that the theory of posthumanism has always been accompanied by some kind of practice. As such the history of the discourse of the posthuman body presented here might also serve as both warning and guide. Superhero comic books invite us to ask questions of the relationship between military, state and corporate power and the production of posthuman bodies. But there is perhaps a more shamanic function for the Post/Humanist cultural critic than simply flagging up undesirable futures or ideological ghosts of the past. Indeed, the real question they invite becomes an ontological one. Instead of asking, "What are we?" humanity is faced with a new, altogether more awe-full question, "what is it that we want to become"?

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Fig 1 Cover of Physical Culture Magazine. Retrieved July 23, 2013, from: <http://www.stumptuous.com/party-like-its-1899-physical-culture-interview-with-craig-staufenberg>

Fig 2 a) The Insult That Made a Man Out of Mac Retrieved July 23, 2013, from: <http://cartoonician.com/the-ad-that-made-an-icon-out-of-mac-2/>

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Fig 5 a) Ditko, S. (1967) Dr. Strange Pin-up from Marvel Collectors' Item classics #10 Retrieved July 23, 2013, from: <http://toobusythinkingboutcomics.blogspot.co.uk/2013/02/farewell-to-doctor-strange-hello-to.html>

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Fig 8 a) Acid Test Poster featuring Thor Retrieved July 23, 2013, from: [http://www.vintageconcertposters.com/_main/Index.cfm?page=api/gallery/photo.cfm&id=267&gid=11&poster=Acid%20Test%20Poster%20\(Goldenrod%20color\)%20-%201966](http://www.vintageconcertposters.com/_main/Index.cfm?page=api/gallery/photo.cfm&id=267&gid=11&poster=Acid%20Test%20Poster%20(Goldenrod%20color)%20-%201966)

b) Acid Test Poster featuring Captain Marvel Retrieved July 23, 2013, from: http://www.vintageconcertposters.com/_main/Index.cfm?page=api/gallery/photo.cfm&id=244&gid=11&poster=Acid%20Test%20Graduation%20Poster%20-%201967

Fig 9 a) "Image Duplicator", Roy Lichtenstein (1963) Retrieved July 23, 2013, from: <http://kirbymuseum.org/blogs/dynamics/2010/06/19/the-image-duplicator/>

b) Marvel Pop Art Productions cover banner, Retrieved July 23, 2013, from: <http://robot6.comicbookresources.com/2013/03/the-fifth-color-marvel-is-seeing-other-people/>

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Fig 10 *Michael Korvac* Retrieved July 23, 2013, from: <http://marvel.wikia.com/Korvac>

Fig 11 Morrison, G. and Chas Truog (1990) *Animal man #19* Retrieved July 23, 2013, from
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Fig 12 a) Rob Liefeld's *Captain America Pin-up* Retrieved July 23, 2013, from:
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Fig 14 Claremont, C. and John Byrne (1980) *X-men #131* Retrieved July 23, 2013, from:
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APPENDIX 1

COMIC BOOK READERS WANTED

Are you a fan of superheroes? Are you a comic book reader?

Hello. I am conducting a research project about the development of the superhero and the readers of superhero comics. Many commentators have suggested that, for better or worse, humanity may be about to enter a stage where it takes control of its own evolution, using technology to alter and/or enhance the human body, thus entering a 'post-human' age. This project is interested in finding out how readers relate to images of the superheroic body, and how this informs perceptions of their own bodies and the possibilities of human technological enhancement. Please take the time to fill out this questionnaire and return it in the envelope provided. If you have any questions or require further information please contact me. My name is Scott Jeffery. My e-mail address is: s.w.jeffery@mail.stir.ac.uk

Thank you for your time.

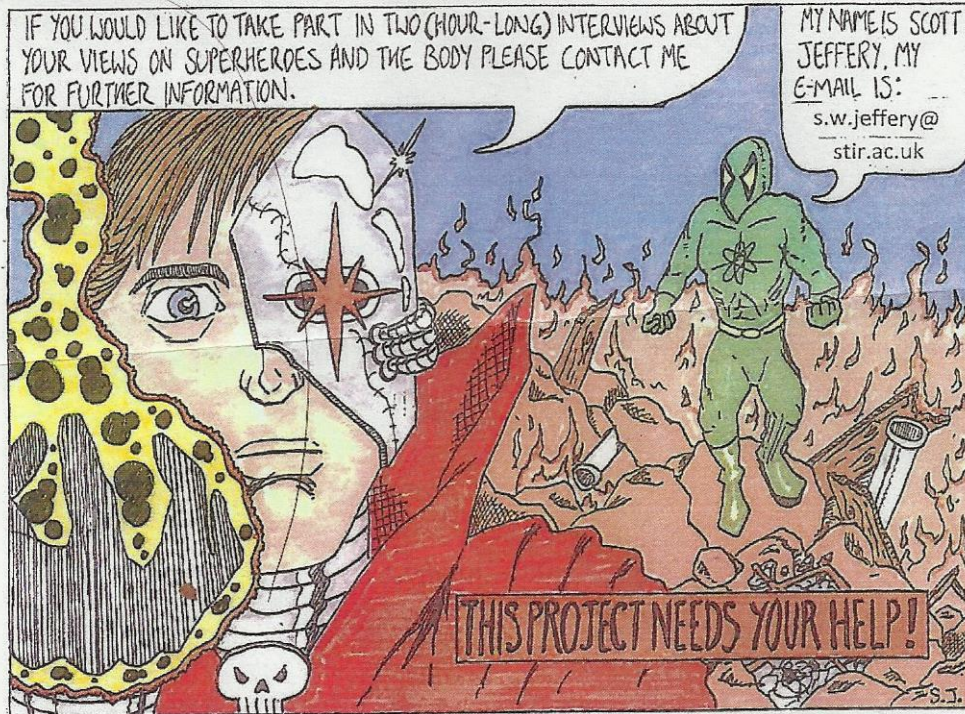
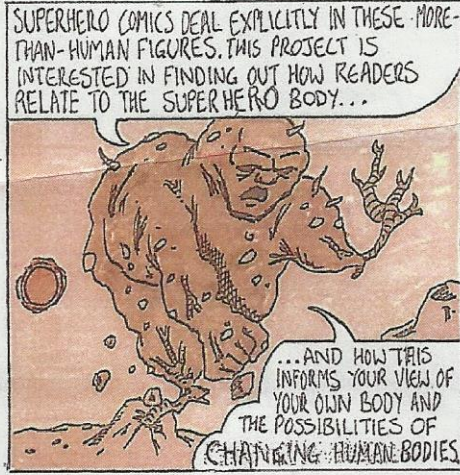
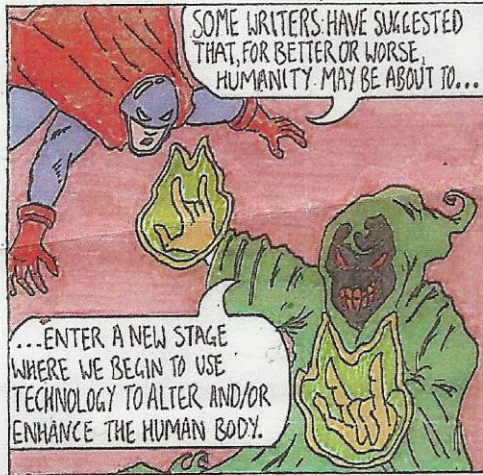
APPENDIX 2

POSTER

COMIC READERS WANTED!

ARE YOU A FAN OF SUPERHERO COMICS?

WOULD YOU LIKE TO TAKE PART IN A STUDY OF COMICS READERS?



APPENDIX 3

INTERVIEW GUIDE

Preliminary Questions

NAME:

AGE:

MALE/FEMALE:

PRESENT ADDRESS:

DO YOU HAVE ANY TATTOOS OR PIERCINGS?

IF YES, PLEASE GIVE DETAILS:

Interview 1

- What kind of comics reader do you think you are? Occasional, regular or committed?
- Do you mostly buy trades or single issues?

- How many comics or graphic novels, on average, do you read per month?

- Do you have a comic book collection?

- If so, how large would you estimate it to be?

- When did you begin reading comics?

- Which comics do you buy most regularly?

- Do you enjoy superhero comics? What is it you enjoy about them?

- Who are some of your favourite characters/ Please say why.

- Who are your least favourites, please say why?

- Who are some of your favourite writers and artists? Please say why.

- Who are some of your least favourite writers and artists? Please say why.

- Are your comic reading choices mostly character or creator led?

- How important is continuity to your reading of comics?

- Would you say that reading comics has influenced the way you see the world in any way?
- If yes, are there any in particular?
- Do you ever relate what you read to your own life?
- If there are any further comics storylines, characters or creators you feel strongly about please say which and why.

Interview 2

- What immediately springs to mind when you think of superhero bodies?
- How important to you is the way that superhero bodies are drawn? Do you notice a difference between certain characters and artists?
- How do you feel about the way female superhero bodies are portrayed?
- Have you ever felt envious or inspired by the superhero body?
- If you could change your body in any way, what would you change?
- If you could have any superpower, what would it be?
- Do you consider superheroes at all realistic? Which characters seem most feasible to you?
- If I say the terms posthuman and transhuman what do you think of? Are there any terms you know of that are similar?
- If it were possible, would you be willing to use drugs and/or technology to increase memory and intelligence?
- If it were possible, would you be willing to use drugs and/or technology to increase physical strength?
- If it were possible, would you be willing to upload your mind into a computer or robotic body?

- Would you be willing to use psychedelic drugs? How do you feel about the idea that such drugs could serve to evolve us beyond the human?
- Which technologies do you think will most change the human body
- Do you think a posthuman future sounds like a positive thing?
- Do you think superhero comics could be useful for thinking about posthumanism?

APPENDIX 4

CONSENT FORM

CONSENT FORM

HUMAN, SUBHUMAN, SUPERHUMAN: THE DEVELOPMENT AND RECEPTION OF THE POSTHUMAN BODY IN SUPERHERO COMIC BOOKS

This project is interested in finding out how readers relate to images of the superhero body, and how this informs perceptions of their own bodies and the possibilities of human technological enhancement. Issues of body modification will be explored. As a comics' reader, would you welcome such transformations? Do the predictions of a 'posthuman age' seem realistic to you, or is it 'merely' the stuff of comic books?

THE INTERVIEWEE

1. This is to certify that I have read the information sheet and understand the purpose of this research project. I give my consent that the data gathered from these interviews may be disseminated at a later date.

2. I understand that my identity and personal details will be kept confidential and all comments attributed to a pseudonym of my choosing.

3. I understand that the interview will be recorded and a transcript of my interview may be kept and used for analysis by the researcher until the end of the project and up to one year following on a private and secure computer. After this point all information will be destroyed.

4. I understand that any complaints or grievances may be addressed to the Head of school for Applied Social Science, Professor Alison Bowes:
a.m.bowes@stir.ac.uk

SIGNED:
DATE:

THE RESEARCHER

1. This is to certify that I have gone through the information sheet with the interviewee and informed them of the purpose and future dissemination of this research.

2. The interviewee has been informed that his identity and personal details are to be kept strictly confidential and all comments attributed to a pseudonym of their choosing.

3. The interviewee has been informed that all interview transcripts and personal information are to be stored on a private, secure computer to be used for analysis up to one year after the completion of the research project, after which all information is to be destroyed.

SIGNED:
DATE:

